GAT & Associates Pty Ltd

Statement of Environmental Effects

August 2018

30-38 Ironbark Avenue, Casula

Demolition of all existing structures and the development of a five (5) storey residential flat building comprising of 63 units (15 x 1-bedroom units and 48 x 2-bedroom units) to be used wholly for the purposes of affordable rental housing.

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Project Ref.	P3219		**Draft**	**Final**
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1. INTRODUCTION

This Statement of Environmental Effects (SEE) has been prepared in support of an application for the proposed demolition of all existing structures and the construction of a five (5) storey residential flat building on land known as 30-38 Ironbark Avenue, Casula. The proposal will provide for 63 units pursuant to the provisions of the State Environmental Planning Policy (Affordable Rental Housing) 2009. Upon its completion, the development will be managed by St George Community Housing who are also the owners of the land.

Our clients are a dedicated not for profit organisation who seek to provide high quality, affordable residential housing options. In their research, they have identified a growing demand for affordable residential accommodation within the Liverpool local government area.

GAT & Associates have been engaged by St George Community Housing to prepare a Statement of Environmental Effects to accompany the development application for Liverpool Council's consideration.

A Pre-DA meeting was held with Council staff on 20 June 2018 with respect to the application which raised two key matters, namely landscaping and common open space. Refer to Appendix G for a copy of these minutes.

Landscaping:

Landscaped area on the site has been nominated having regards to SEPP (Affordable Rental Housing) 2009.

Clause 14(c)(i) of the SEPP requires that a landscaped area of 35m^2 per dwelling is to be provided. As the current application seeks 63 units, a landscaped area of 2,205m^2 is therefore required.

As demonstrated on the submitted plans, the proposal provides for 885m^2 of the subject site as landscaped area, representing a shortfall of 1320m^2.

However, to comply with the standard is considered to be completely unreasonable given that the required 2,205m^2 of landscaping is equivalent to 80% of the total site area. The irrationality of the standard is even more apparent when one considers that Clause 14(c)(ii) requires a private developer to set aside just 30% of a site as landscaping, which is equal to just 835m^2.

As the SEPP is not clear in this matter (acknowledging that Division 1 relates to dual occupancies, multi dwelling housing and residential flat buildings), we can only assume that the control would apply in the case of a dual occupancy or townhouse development whereby the 35m^2 could be provided as a courtyard/rear yard to each dwelling. In the case of a residential flat building, particularly in a high-density zone such as the subject site, the control simply doesn't make sense.

The current proposal comfortably achieves the 30% requirement that would otherwise apply to a private developer, providing 885m^2 (32%). The application also includes various hard paved areas at ground level which although not technically landscaped area, positively contribute to the landscaped setting and communal open space.

Common open space:

The proposal comprises of two areas of communal open space with one located at ground level primarily along the western boundary but also wrapping around to the southern and northern boundaries while a separate space is provided at Level 4.

When considered numerically the proposal, as described above, achieves an area of 713m^2 or 26% of the site as communal open space, surpassing the minimum requirements of the Apartment Design Guide (ADG).

The proposed communal open space however does include an area of the front setback as part of this space. Although a variation is sought in this regard, it is worthy to acknowledge that since the Pre-DA a greater portion of communal open space has been provided along the western and northern boundaries with detailed embellishments to offer a wider range of usability.

Durak Reserve is also located within walking distance of the subject site, being on the opposite side of Kurrajong Road reflective of ADG objectives.

The proposed areas are considered to include areas that are of a size and dimension that are useable and enable a variety of experiences to be enjoyed by future residents including areas for active and passive play. The proposed variation is therefore considered to be reasonable in this instance.

A Design Excellence Panel meeting was also held on 14 June 2018 to discuss the proposal. Refer to Appendix H for a copy of these minutes.

The submitted architectural plans have demonstrated how the development positively responds to the topography of the site.

Refer to the comments made above with regards to the ground floor communal open space.

Communal open spaces both at ground level and at level 4, have been designed to maximise their function and usability as attractive areas for both passive and active recreation. They offer a dimension and location that maximises solar amenity and desirable recreation outcomes.

Direct pedestrian access has been provided to the sites secondary frontage to Kurrajong Road. Whilst the sites title documents restrict access from the site to Kurrajong Road, the development has responded positively to the DEP's comments maximising connectivity and accessibility to and from the site.

Colourbond fencing, with indentation has been proposed along the Kurrajong Street frontage which is broken up by planting, offering a visual relief from the fence and a complimentary outcome in terms of natural and built features.

On site waste collection was recommended by the Design Excellence Panel. Reference should be made to the accompanying waste management report, which confirms the sites and developments appropriateness to provide on-street collection.

This Statement of Environmental Effects is based on information and details shown on the following plans prepared by DKO Architecture, Project No. 11863, dated 23 August 2018 Rev A:

- DA000 Title Page
- DA100 Site Analysis

- DA101 Site Plan and Streetscape
- DA102 Demolition Plan
- DA200 Ground and Typical Levels
- DA201 Upper Level
- DA300 Typical Floor Plans
- DA301 Typical Floor Plans& Adaptable Unit Plans
- DA400 Elevations & Sections
- DA500 Calculations – COS – Landscape - Deepsoil
- DA501 Solar Access & Cross Ventilation
- DA502 Eye of the Sun
- DA503 Shadow Diagrams
- DA504 Calculations – GFA – Apartment Mix

In addition to the above plans, the following reports and documents have also been considered and should be read in conjunction with this Statement of Environmental Effects:

- Report on Geotechnical Assessment prepared by idealgeotech, dated October 2017 (30 Ironbark Avenue, Casula);
- Report on Preliminary Contamination Assessment, prepared by idealgeotech, dated October 2017 (30 Ironbark Avenue, Casula);
- Report on Geotechnical Assessment prepared by idealgeotech, dated October 2017 (32-34 Ironbark Avenue, Casula);
- Report on Preliminary Contamination Assessment, prepared by idealgeotech, dated October 2017 (32-34 Ironbark Avenue, Casula);
- Report on Geotechnical Assessment prepared by idealgeotech, dated October 2017 (36-38 Ironbark Avenue, Casula);
- Report on Preliminary Contamination Assessment, prepared by idealgeotech, dated October 2017 (36-38 Ironbark Avenue, Casula);
- Survey Plan prepared by Norton Survey Partners dated March 2018.
- Landscape Plans prepared by Inview Design dated 7.07.18.
- Stormwater Drainage Plans prepared by Bonacci dated July 2018.
- Traffic and Parking Assessment prepared by TFF Consulting dated 18.07.18.
- SEPP 65 Design Verification Statement prepared by DKO Architecture Pty. Ltd dated August 2018.
- Waste Management Plan prepared by TTM dated 17.08.18.
- BASIX Certificate prepared by Northrop.
- Erosion and Sediment Control Plan prepared by Bonacci dated July 2018.
- BCA Report prepared by Technical Inner Sight dated 13 August 2018.

- Acoustic Report prepared by Acoustic Logic dated 10.8.18.
- Cost Estimate prepared by Mitchell Brandtman dated 10 August 2018.
- Arboricultural Impact Assessment prepared by Allied Tree Consultancy dated July 2013.
- Demolition and Construction Waste Management Plan prepared by TTM dated 13.08.18.
- Access Report prepared by Morris Goding Access Consulting dated 21 August 2018.

This Statement of Environmental Effects has been prepared in support of the proposed application. This report is based on the submitted plans, inspections of the site and general knowledge of the site and locality, with the aim of:

- Assessing the proposal against relevant statutory controls.
- Determining whether the proposal is acceptable within the existing and likely future context of the area.
- Considering whether the proposal is acceptable within the broader planning controls.
- Addressing any likely environmental and external impacts (positive and negative).

The proposed development has been assessed in relation to:

- Section 4.15 Considerations under the Environmental Planning & Assessment Act, 1979.
- Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment.
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
- State Environmental Planning Policy (Affordable Rental Housing) 2009.
- State Environment Planning Policy No.55 – Remediation of Land.
- State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development.
- Liverpool Local Environmental Plan 2008.
- Liverpool Development Control Plan 2008.

2. SITE CONTEXT

The subject site is commonly known as Nos. 30-38 Ironbark Avenue, Casula and is legally defined as Lots 19, 20, 21, 22, 23 in Depostited Plan 245413. The subject site is located on the southern side of Ironbark Avenue and and is bound by Kurragong Road to the south. The site provides for a primary frontage of 80.20m to Ironbark Avenue and an overall site area of 2,782m^2. Refer to Figure 1 below.

Source: Six Maps, 2018

Figure 1 Site Location Map

Located on the subject site at present are detached dwellings with associated outbuildings. All existing structures will be demolished as part of the proposed works.

Development in the vicinity of the site is typically characterised by low to medium density residential development. In view of the R4 High Density Residential zone afforded to the site, the area will inevitably undergo a transition to higher density building forms with the proposed development representative of this desired future character.

The subject site is well serviced by large expanses of public green open space with Daruk Park located approximately 31m south of the site and Jardine Park also situated approximately 585m east of the site, each of which offer ample active and passive recreational opportunities within the

community. Lurnea High School, Casula High School and Prestons Public School are all proximately located to the site being within 600m to the north-west, west and south-west of the site, respectively.

Casula Mall is located approximately 130m south-east of the site providing for numerous and a diverse array of services, amenities and commercial outlets. Casula Library and Casula Community Centre are also situated approximately 220m south of the site, diversifying the available local amenities.

The site is also adequately serviced by public transport with regular bus services operating along Kurrajong Road in accordance with the accessible area criteria detailed under State Environmental Planning Policy (Affordable Rental Housing) 2009, linking the subject site to a more expansive public transport network, nearby suburbs, amenities and services.

Refer to the Figures below for a series of photographs of the site and surrounds.

Figure 2 No. 30 Ironbark Avenue, Casula

Figure 3 No. 32 Ironbark Avenue, Casula

Figure 4 No. 34 Ironbark Avenue, Casula

Figure 5 No. 36 Ironbark Avenue, Casula

Figure 6 No. 38 Ironbark Avenue, Casula

Figure 7 No. 40 Ironbark Avenue, Casula. Adjoining multi dwelling housing development to the west of the subject site.

Figure 8 Eastern view looking down Ironbark Avenue

Figure 9 Western view looking down Ironbark Avenue

Figure 10 Norther view looking down Brigalow Avenue

Figure 11 Durak Reserve located on the southern side of Kurrajong Road, Casula.

Figure 12 Casula Mall

3. PROPOSAL

The proposal before Council seeks the demolition of all existing structures across the subject land and the redevelopment of the site as a five (5) storey residential flat building. The proposal comprises a total of 63 units including 15 x 1-bedroom (24%) and 48 x 2-bedroom (78%) unit layouts to be wholly used for the purposes of affordable rental housing. The subject site is currently under ownership of St George Community Housing who will manage the development upon its completion.

A detailed summary of the proposal is provided in the comments below.

Ground Floor Plan/Level 0:

- Vehicular access is proposed from the north-eastern corner of the site along Ironbark Avenue, providing access to an at grade car park located along the eastern boundary wrapping around to the south of the site. A total of 30 car spaces are proposed including 7 accessible spaces. The proposed car parking spaces will have minimal visual impact from the street given the proposed landscaping and their general setback from the street which works to provide an adequate visual balance. The impression of these car spaces will be further mitigated by the built form itself.
- Communal open space areas are located along the western boundary wrapping around to the south and north of the site. These spaces are clearly defined and promote useability.
- 6 x 2-bedroom units are proposed at this level.
- The remainder of the level will comprise of lobby areas, plant/switch rooms, hydraulic pump room, bulky waste and waste areas. Two central lifts will service all levels of the buildings. Two sets of fire stairs are also proposed in accordance with BCA requirements. Furthermore, a management room for St George Community Housing is also proposed at this level.
- A substation is proposed toward the north-eastern corner of the site.

Level 1:

- 11 x 2-bedroom units and 4 x 1-bedroom units are proposed.

Levels 2

- 11 x 2-bedroom units and 4 x 1-bedroom units are proposed

Level 3:

- 11 x 2-bedroom units and 4 x 1-bedroom units are proposed

Level 4:

- 9 x 2-bedroom units and 3 x 1-bedroom units are proposed. A centrally located communal open space area is provided at this level.

The rear setback is compliant with the provisions of the Apartment Design Guide, ensuring appropriate building separation is achieved. The balconies facing the street provide casual surveillance to the entrance of the building and communal spaces.

Drawing No. 400 show elevations of the proposed finishes and materials. The selected materials have been chosen to reflect a cost effective and attractive outcome on the site, with the primary focus being a low maintenance approach and timeless materiality. A neutral colour palette reinforces this design philosophy and enables a built form that ages well both aesthetically and physically.

The overall design of the building has been carefully considered particularly in view of the site's overall length which spans across five existing allotments. The building mass has been broken up into four dominant elements through consistent breaks in the façade creating an almost terrace like appearance. The breaks in the façade further provide for visual relief whilst alternate face brick colours of light and medium tones enable further distinction. The central portion of the building is visually recessed through darker tones with the landscaping at roof level further softening the development. Modern touches such as vertical screening complements the building form and reinforces the strong vertical lines achieved by the distribution of building mass. Reference should be made to Figure 13 below prepared by DKO Architecture Pty. Ltd.

Figure 13 Perspective

As part of the submitted application, the 2-bedroom layouts have been designed to demonstrate how two single beds could be incorporated to accommodate a family. In this regard, the proposal promotes flexible living conditions to accommodate different households. All of the proposed residential units will be nominated as affordable housing.

Mailboxes servicing the development will be located in two separate areas along the entry paths to the two separate building entries.

A BASIX certificate has been prepared with respect to the proposed residential units and nominates criteria to achieve the respective Water, Thermal and Energy targets. As part of the proposed development a 5,000 litre rainwater tank has been nominated and will service common area landscaping on the site. A copy of the BASIX certificate and associated thermal documents are provided under a separate cover.

Reference should be made to the submitted plans prepared by DKO Architecture.

In reference to the submitted landscape plan, enhanced planting has been provided throughout the subject site offering a balance between hard and soft paved areas. New planting assists to soften the impression of built form when viewed from the streetscape and surrounding sites.

The following are objectives, which were considered in formulating the proposed development:

- To implement the outcomes of the following planning documents:
  - Section 4.15 Considerations under the Environmental Planning & Assessment Act, 1979.
  - Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment.
  - State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
  - State Environmental Planning Policy (Affordable Rental Housing) 2009.
  - State Environment Planning Policy No.55 – Remediation of Land.
  - State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development.
  - Liverpool Local Environmental Plan 2008.
  - Liverpool Development Control Plan 2008.
- To provide for a high quality residential development that complements the desired future character of the area.
- To ensure that the proposed development does not create any unreasonable impacts to adjoining properties.

Technical reports have been prepared by the required consultants with their conclusions summarised below. Reference should be made to these accompanying reports attached under separate covers for a more detailed assessment of the proposal. The following comments with respect to these reports are provided.

Acoustic Report prepared by Acoustic Logic:

- The report assesses external noise impacts on the site (traffic noise impacts from Kurrajong Road and to a lesser degree from the M5 motorway) and noise emissions from the site (primarily mechanical plant equipment).
- The report recommends treatments to bedrooms and/or living rooms being predominantly laminate glazing and appropriate acoustic seals. There is no restriction imposed to the operable nature of the windows.
- No additional treatments are required to the external roof/ceiling or external wall construction (where concrete or masonry materials are used).

BCA Report prepared by Technical Inner Sight:

- The report concludes that the proposed building can achieve compliance with the provisions of BCA 2016.

Civil and Stormwater Concept prepared by Bonacci:

- The submitted report and plans outline the proposed concept stormwater plans, proposed stormwater drainage catchment and proposed stormwater quality catchment.

- The report nominates a 10m^{3}OSD tank is proposed at the catchment low point at the north east corner of the site, under the common driveway.
- The report confirms the site is not located in a flood affected zone.

Traffic Report prepared by TFF:

- The report confirms compliance with the parking provisions required under SEPP (Affordable Rental Housing) 2009 and acknowledges that the additional traffic from the proposed development will be minimal.
- The report further assesses the design of access, car parking and servicing facilities and notes compliances with the relevant standards.

Waste Management Plan prepared by TTM:

- The WMP details residential refuse; refuse collection and recommended operational requirements. Collection is nominated to be via Council pick up.

4. SECTION 4.15 EVALUATION

The following section provides an assessment of the proposed development in accordance with the provisions of Section 4.15 of the Environmental Planning and Assessment Act, 1979.

(1) Matters for consideration – general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development, the subject of the development application.

The provisions of:

4.1 Relevant State, Regional and Local Environmental Planning Instruments

4.1.1 Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment

The proposed development accords with the outcomes and objectives of the Greater Metropolitan Regional Environmental Plan No.2. Appropriate sediment and control devices will be placed on the site during site works to ensure that pollutants and runoff from the site will not impact upon the Georges River. Reference should be made to the Erosion and Sediment Control Plan prepared by Bonacci as part of this application.

4.1.2 State Environmental Planning Policy – Building Sustainability Index (BASIX)

The proposal has been assessed against the provisions of State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004. The proposal satisfies the targets set by the Policy in relation to water, thermal and energy.

A BASIX Certificate has been prepared by Northrop for the proposed residential flat building and is attached under a separate cover. The certificate demonstrates compliance with the required Water, Thermal and Energy provisions under BASIX.

4.1.3 State Environmental Planning Policy (Affordable Rental Housing) 2009

This proposal has been designed to meet the provisions of the State Environmental Planning Policy (Affordable Rental Housing) 2009 (SEPP ARH). The subject site is located in an accessible area and demonstrates compliance with the accessible area criteria. Accordingly, Appendix A provides for an assessment of the proposal against the controls contained under Division 1 In-fill Affordable Housing.

Reference is to be made to Appendix A within this Statement of Environmental Effects.

4.1.3.(a) Landscaped Area

The proposal has been prepared by St George Community Housing, a recognised social housing provider. Based on the provisions of Clause 14(c)(i), a landscaped area of 35m^2 per dwelling is to be provided. As the proposal seeks 63 units this is equivalent to a landscaped area of 2,205m^2.

The proposal provides for 885m^2 of the subject site as landscaped area, representing a shortfall of 1,320m^2.

To comply with the standard is considered to be completely unreasonable given that the required 2,205m^2 of landscaping is equivalent to 80% of the total site area. The irrationality of the standard is even more apparent when one considers that Clause 14(c)(ii) requires a private developer to set aside just 30% of a site as landscaping.

As the SEPP is not clear in this matter, we can only assume that the control therefore applies in the case of a townhouse development whereby the 35m^2 could be provided as a courtyard/rear yard to each dwelling. In the case of a residential flat building, particularly in a high-density zone such as the subject site, the control simply doesn't make sense.

The current proposal is notably compliant with the 30% requirement that would otherwise apply to a private developer, providing 885m^2 (32%). The application also includes various hard paved areas at ground level which although not technically landscaped area, positively contribute to the landscaped setting and communal open space. A variation is therefore considered to be reasonable in this instance.

4.1.3.(b) Character of Local Area

- Locality and Street Character:

The site is located within a high density residential zone, though development immediately adjoining the site to the north, east and west comprises of predominantly single and two storey fibro and brick dwellings that are of an older housing stock.

In view of the R4 High Density Residential zone afforded to the site, the area will inevitably undergo a transition to higher density building forms with the proposed development representative of this desired future character.

The site is situated in an area which is well serviced by local amenities and infrastructure with Casula Mall, Daruk Park, Jardine Park, Lurnea High School, Casula High School all located within walking distance and proximity of the site, with bus stops located within walking distance from the site along Kurragong Road that operate to adequately service the site. This public transport infrastructure provides valuable links to nearby suburbs, local amenities and services.

It is therefore considered that the proposed building is in keeping with the desired future character of the area.

- Landform:

The proposed built form has been relatively centred over the subject site allowing for landscaping and deep soil planting along the sites boundaries. Furthermore, the proposed built form will be provided with appropriate setbacks, further contributing to the provision of landscaping and deep soil planting.

- Street patterns:

Existing street and subdivision patterns of the area are reflective of the areas initial character. The proposal satisfies Council's minimum allotment size and frontage controls through the consolidation of Nos. 30, 32, 34, 36 and 38 Ironbark Avenue, Casula.

Parking is proposed at grade, to the side and rear of the site and will generally be concealed from the street by the proposed built form. Landscaping works are proposed either side of the driveway to soften its appearance to the street.

- Views and Vistas:

There are no substantial views attainable from the subject site.

- Conclusion:

Based on the above, it is our view that the proposed development is in keeping with the existing and future character of the area.

The built forms presentation to the street, together with appropriate colours and materials, all respond to the desired future character of the area. As detailed under section 3 of this report, the proposed building has been designed with a timeless materiality and low maintenance outcome.

The proposal will be consistent with the desired future character of the area evident through its zoning and consistency with the relevant planning policies and controls.

It is considered that the proposed development will greatly benefit the local community by providing for affordable rental housing in an area well serviced by local amenities and public transport facilities.

4.1.4 State Environmental Planning Policy No. 55 – Remediation of Land

Clause 7 of the State Environmental Planning Policy No. 55 – Remediation of Land requires Council to consider whether land is contaminated prior to granting consent to the carrying out of any development on that land.

Should the land be contaminated Council must be satisfied that the land is suitable in a contaminated state for the proposed use. If the land requires remediation to be undertaken to make the land suitable for the proposed use, Council must be satisfied that the land will be remediated before the land is used for that purpose.

A Stage 1 Environmental Assessment was undertaken at the subject site. Based on the observations which were made during these investigations it was concluded that the site in its current condition is suitable for the proposed development and associated land use. The results of the chemical analyses indicate that the site does not present a risk to human health or the environment in a 'residential with garden/accessible soil' ('A') setting.

4.1.5 State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development

This State Policy aims to improve the design quality of residential flat buildings of three or more storeys, incorporating four or more dwellings.

The policy sets out a series of design principles for Local Council or other consent authorities to consider when assessing development proposals for flats.

The SEPP 65 underwent a comprehensive review and the changes were notified on the NSW legislation website on 19 June 2015 and will commence on 17 July 2015. For development applications lodged after 19 June 2015 and determined after 17 July 2015, the Apartment Design Guide, along with the changes to SEPP 65 will apply.

The proposed apartments are designed and accord with the design principles as stipulated in this State Environmental Planning Policy. All information and details shown within this Statement of Environmental Effects is based on the submitted plans prepared by DKO Architecture.

State Environmental Planning Policy No. 65 specifies nine design quality principles for residential flat buildings. These principles are as follows:

Principle 1 Context and Neighbourhood Character

Principle 2 Built Form and Scale

Principle 3 Density

Principle 4 Sustainability

Principle 5 Landscape

Principle 6 Amenity

Principle 7 Safety

Principle 8 Housing Diversity and Social Interaction

Principle 9 Aesthetics

The aims and objectives of this policy are:

(1) "This policy aims to improve the design quality of residential apartment development in New South Wales.

(2) This policy recognises that the design quality of residential apartment development is of significance for environmental planning for the state due to the economic, environmental, cultural and social benefits of high quality design.

(3) Improving the design quality of residential apartment buildings aims:

(a) to ensure that they contribute to the sustainable development of New South Wales;

(i) by providing sustainable housing in social and environmental terms; and

(ii) by being a long term asset to their neighbourhood; and

(iii) by achieving the urban planning policies for their regional and local contexts; and

(b) to achieve better built form and aesthetics of buildings and the streetscapes and the public places they define; and

(c) to better satisfy the increasing demand, the changing social and demographic profile of the community, and the needs of the widest range of people from childhood to old age, including those with disabilities; and

(d) to maximise amenity, safety and security for the benefit of their occupants and the wider community; and

(e) to minimise the consumption of energy from non-renewable resources, to conserve the environment and to reduce greenhouse gas emissions, and

(f) to contribute to the provision of a variety of dwelling types to meet population growth, and

(g) to support housing affordability, and

(h) to facilitate the timely and efficient assessment of applications for development to which this Policy applies.

(4) This Policy aims to provide:

(a) consistency of policy and mechanisms across the State; and

(b) a framework for local and regional planning to achieve identified outcomes for specific places."

The SEPP notes that good design is a creative process which, when applied to towns and cities, results in the development of great urban places, buildings, streets, square and parks.

Good design is inextricably linked to its site and locality, responding to the landscape, existing built form, culture and attitudes. It provides sustainable living environments, both in private and public areas.

Furthermore, good design serves the public interest and includes appropriate innovation to respond to technical, social, aesthetic, economic, and environmental challenges.

These nine design quality principles do not generate design solutions, but provide a guide to achieving good design and the means of evaluating the merit of proposed solutions. These principles are addressed under Appendix B of this report.

4.1.5.(a) Residential Apartment Design Guidelines

Further to the above design quality principles, Clause 30(2) of SEPP No. 65 also requires residential apartment development to be designed in accordance with the Department of Planning's publication entitled Apartment Design Guide (ADG). Compliance with ADG is assessed under a table within Appendix C of this report. Refer to Appendix C for an assessment of the planning guidelines of Apartment Design Guide.

4.1.5.(b) An Assessment of the Proposal Under the Apartment Design Guidelines

Separation Setbacks

The built form has generally achieved compliance with the relevant built form separation distances as prescribed under part 3F of the Apartment Design Guide. For built form up to 12m (4 Storeys), a minimum separation distance of 6m to habitable rooms and balconies and 3m to non-habitable rooms is required. For building heights up to 25m (5-8 Storeys) a separation distance of 9m to habitable rooms and balconies and 4.5m to non-habitable rooms is required. Noting that no separation is required between blank walls.

As it relates levels 1, 2 and 3 the development has achieved compliance with the 6m and 3m minimum separation distance requirements.

As it relates to level 4 along the western facade, a breach to the minimum 9m habitable room separation distance is sought. This encroachment is equal to 3m at its widest point and is to a blank wall which does not require any separation distance. Refer to Figure 14. Therefore, the development has achieved compliance with Part 3F of the ADG.

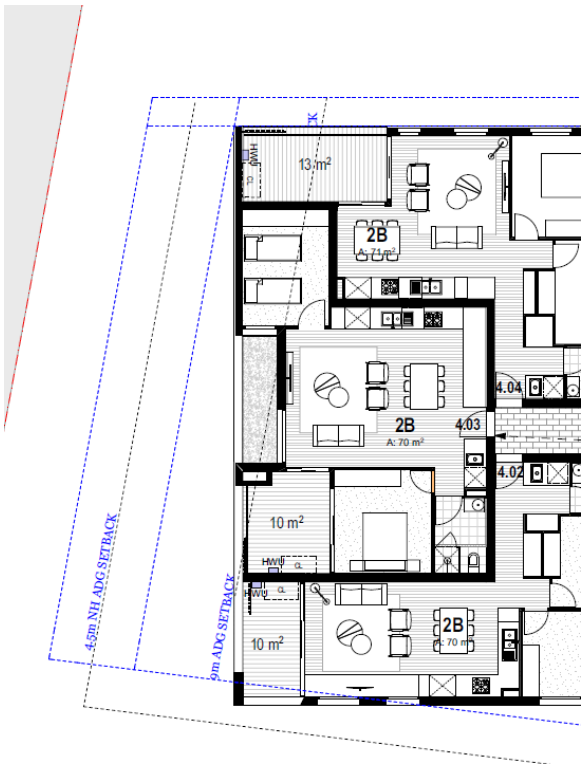

Figure 14 Level 4 excerpt

Source: DKO Architecture

No additional bulk or scale would result in view of the limited length of the wall given the overall context/depth of the proposed development. Therefore, no additional perceived bulk or scale would result from the minor breach.

As it relates to the rear boundary at each level, a separation distance of 6m is required from Ground – Level 3, while a 9m is required from habitable rooms at Level 4. Minor variations are

sought of up to 500mm beyond the separation distance requirement at Ground, up to 850mm at Levels 1 – 3 and up to 1.5m at level 4. Refer to Figures 15-17. It is important to note that this is contained to parts of the built form which contribute to the stepped rear facade and built forms articulation. There are no visual privacy concerns considered to result in this regard, as the rear boundary interface is to Kurrajong Road and not strictly to another site that would be redeveloped to contain residential built forms. Therefore, there are no visual privacy implications deemed to result as there is not opportunity for overlooking considered to exist.

Figure 15 Ground floor excerpt

Source: DKO Architecture

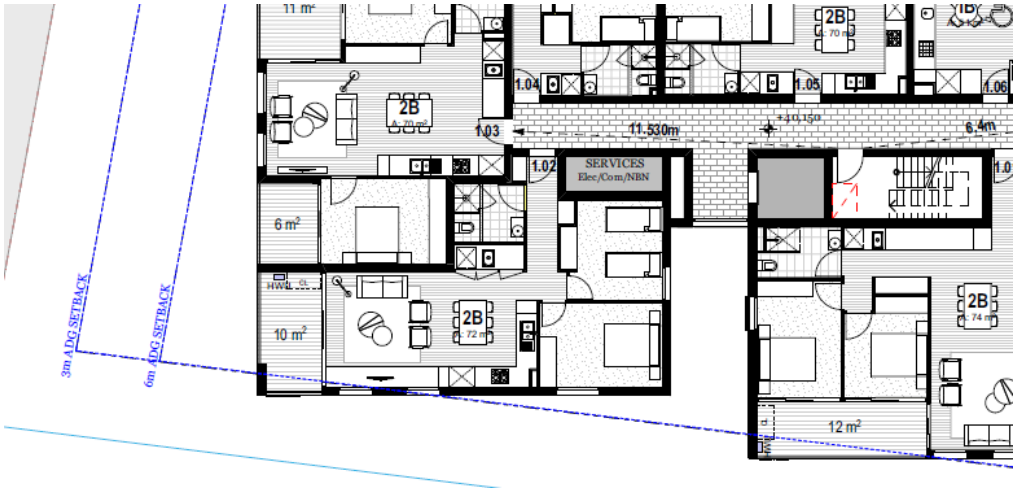

Figure 16 Levels 1 - 3 excerpt

Source: DKO Architecture

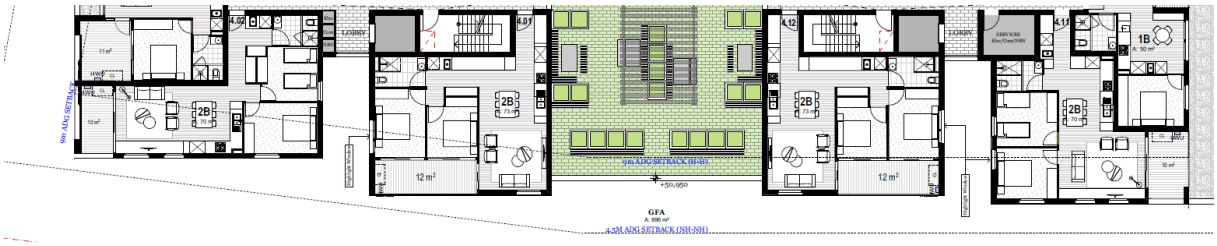

Figure 17 Level 4 excerpt

Source: DKO Architecture

Expressed built elements contribute to the overall developments articulation, creating a stepped built form which works to positively mitigate and perceived intrusion to the public domain. Therefore, no excessive bulk or scale to the public domain will result as per this application.

Overall, the development is considered to be well articulated in its design providing for steps in the building façade punctuated by areas of private open space or glazed elements. The contrasting materials for the external walls of the development further provide for visual interest and complement the modern design of the development.

Overall, the breaches are considered minor in nature given the context of the proposed development and the angled nature of the side boundaries. In general, the development is considered to be compliant with any impacts from minor setback encroachments adequately mitigated.

Communal Open space

The proposal comprises of two areas of communal open space with one located at ground level primarily along the western boundary but also wrapping around to the southern and northern boundaries while a separate space is provided at Level 4.

When considered numerically the proposal, as described above, achieves an area of 713m^2 or 26% of the site as communal open space, surpassing the minimum requirements of the Apartment Design Guide (ADG).

The proposed communal open space does include an area of the front setback as part of this space. Although a variation is sought in this regard, it is worthy to acknowledge that since the Pre-DA a greater portion of communal open space has been provided along the western and northern boundaries with detailed embellishments to offer a wider range of usability.

Durak Reserve is also located within walking distance of the subject site, being on the opposite side of Kurrajong Road reflective of ADG objectives.

The proposed areas are considered to include areas that are of a size and dimensions that are useable and enable a variety of experiences to be enjoyed by future residents including areas for active and passive play. The proposed variation is therefore considered to be reasonable in this instance.

4.1.6 Liverpool Local Environmental Plan 2008

A comprehensive assessment of the proposal against the controls can be found in Appendix C.

Additional comments are provided below.

4.1.6.(a) Land Zoning & Objectives

The subject site is zoned R4 High Density Residential under the LLEP 08. Refer to Figure 18 below.

As residential flat buildings are listed as a permissible development, the proposal may be carried out with the consent of Council.

The objectives of the R4 High Density Residential Zone are as follows:

- *To provide for the housing needs of the community within a high density residential environment.*
- *To provide a variety of housing types within a high density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide for a high concentration of housing with good access to transport, services and facilities.*
- *To minimise the fragmentation of land that would prevent the achievement of high density residential development.*

The following comments are provided with respect to the zone objectives:

- The proposed residential flat building will replace the existing dwellings on the site with 63 proposed units to provide for the housing needs of the community within a high-density environment.
- The proposal comprises of a mix of 1 and 2-bedroom units, including adaptable designs ensuring a variety of housing types are available.
- No other land uses are proposed.
- The site is readily accessible by public transport with bus stops located within proximity from the development. The site is also located in proximity to Casula Mall to the south-east of the site.
- The proposal will not result in the fragmentation of land.

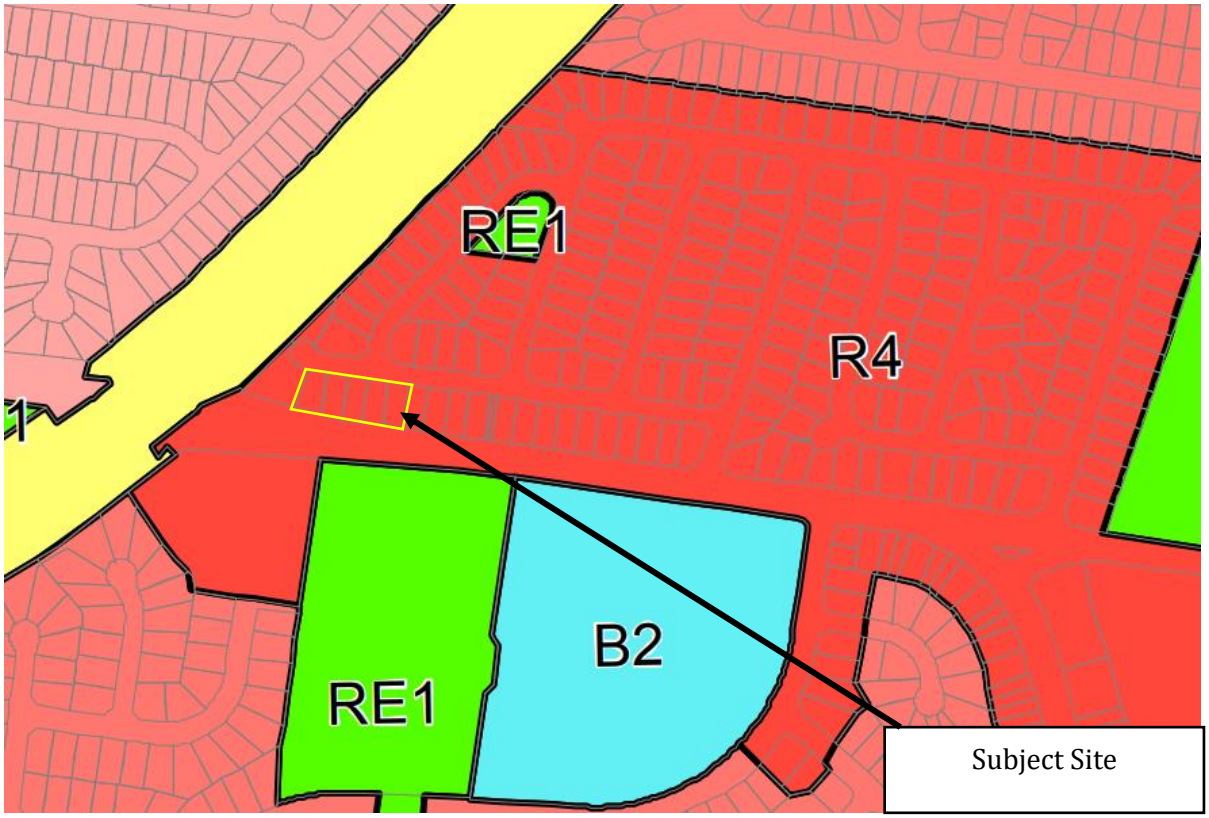

Figure 18 Land Zoning Map, Source Liverpool Local Environmental Plan 2008

4.1.6.(b) Height of buildings

The subject site is limited to a maximum building height of 18m. Refer to Figure 19.

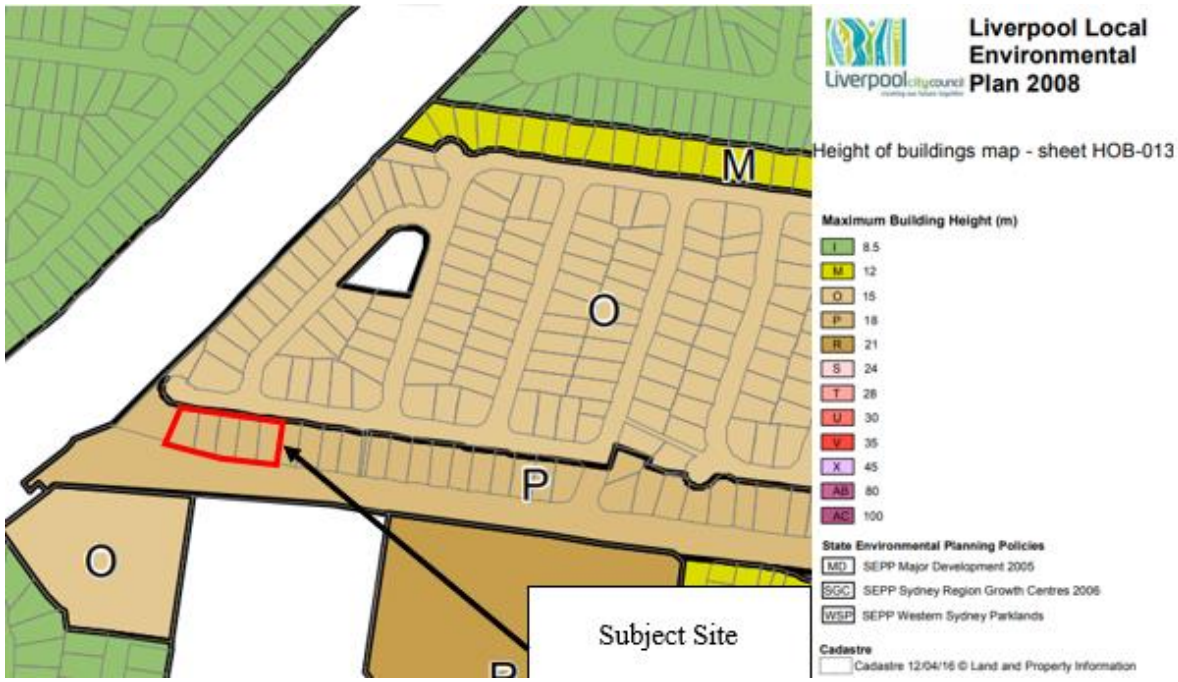

Figure 19 Height of Buildings Map, Source: Liverpool Local Environmental Plan 2008

The proposal will result in a maximum building height of 19 metres, exceeding the control by 1m or 5.5%.

It is worthy to note that minor breach being 1m occurs to the north and south of the site and is only attributable to the lift overrun. The maximum height to the building parapet measures 17 metres, which is compliant with the standard, ensuring no habitable floor area contributes to the breach. This is considered a minor encroachment and does not provide for any adverse impacts as detailed within this report.

The proposal is notably compliant in terms of floor space ratio and in this respect, reference is made to the decision of the Land & Environment Court*: Abdul-Rahman v Ashfield Council [2015] NSWLEC 112 (28 April 2015).* The case established that where additional FSR is proposed to facilitate the provision of affordable rental housing, an increased building envelope is likely. This is evident in the current proposal acknowledging compliance with the FSR control of 1.7 has been achieved, with the proposal having an FSR of 1.7:1.

The images below detail the breaches in height.

Figure 20 Variation to building height

Further, it is widely recognised that housing affordability in Sydney is becoming increasingly difficult to achieve. Our client is a not-for-profit organisation seeking to address a prevalent issue in Sydney's housing market. Our client is committed to providing a development that is 100% affordable and social housing far surpassing the requirements of SEPP (Affordable Rental Housing) 2009, which only requires between 20 – 50% of dwellings be provided as affordable rental housing.

The additional height sought on the site will enable increased residential accommodation to be provided on site without exceeding the floor space ratio control.

Reference should be made to the submitted Clause 4.6 Variation Statement under Appendix F.

4.2 Draft Relevant State, Regional and Local Environmental Planning Instruments

The site falls outside the scope of the *Draft Liverpool LEP 2008 Amendment No. 52 and Draft Liverpool DCP 2008 Part 4 Liverpool City Centre 16-06-16.*

4.2.1 Draft State Environment Planning Policy (Environment)

In October 2017, the NSW Department of Planning and Environment began its review of the State's planning policies to modernise and simplify the planning systems.

The planning provisions for waterways, catchments, world heritage and urban bushland are currently contained in seven State Environmental Planning Policies (SEPPs), the Standard Instrument – Principal Local Environmental Plan (Standard Instrument), and in Ministerial Directions for plan making issued under the Environmental Planning and Assessment Act 1979.

An Explanation of Intended Effect for the SEPP (Environment) was publicly notified between 31 October 2017 to 31 January 2018. The SEPP (Environment) will integrate provisions from seven existing SEPPs relating to catchments, waterways, urban bushland and world heritage, and to reduce the complexity and streamline the planning system.

The proposed SEPP (Environment) will:

- Encourage the proper management, development and conservation of natural resources and the protection of the environment, in line with the objectives of the Act
- Enable growth that maintains and enhances the health and integrity of our natural and cultural heritage for the benefit and enjoyment of the present community and for future generations
- Streamline development assessment by identifying and considering environmental values and constraints at the earliest possible stage in the development decision making process, using evidenced based planning methods
- Promote ecologically sustainable development that supports a balanced approach to the use of land and natural resources, and provides for long term environmental, economic and social wellbeing
- Adopt a risk based approach to minimise cumulative negative impacts of development on both the immediate site and on a surrounding area or region
- The proposed SEPP fits within a range of plans and strategies including A Plan for Growing Sydney, draft District Plans, Regional Plans, local environmental plans, Ministerial Directions, and development control plans

It is considered that the proposal would not be contrary to the provisions under the current Greater Metropolitan Regional Environmental Plan No. 2 Georges River Catchment which has been assessed under Section 4.1.1 of this SEE and determined to not cause any negative impacts to the Georges River Catchment.

Therefore, the proposed development has considered the relevant draft planning instrument.

4.3 Development Control Plans

4.3.1 Liverpool Development Control Plan 2008

A comprehensive assessment of the proposal against the controls can be found in Appendix D.

4.3.1.(a) Social Impact Assessment

LDCP08 identifies the proposed development as one which requires a Social Impact Comment (SIC). This is due to the number of residential units proposed (63) being above the threshold (20) requiring a Social Impact Comment/Assessment. Accordingly, we make the following comments:

Accommodation:

The proposal will provide for 63 well designed units which will appeal to a range of different sized family groups. As part of the submitted application, the 2-bedroom layouts have been designed to demonstrate how 2 single beds could be incorporated to accommodate a family. In this regard, the proposal promotes flexible living conditions to accommodate different households.

Health and Wellbeing:

The units will provide for good amenity in terms of solar access and natural ventilation. The proposal achieves good levels of both solar access and natural ventilation.

The close proximity of this site to public transport will reduce the reliance upon private vehicles.

Security and Safety:

As detailed within this report, there are ample opportunities within the development for casual surveillance of public areas which is to the public benefit.

Values and Expressions:

The proposed development is of a high architectural standard and will set a high-quality tone for this neighbourhood. In this regard, the attention to detail in the design of the building facade particularly defining the communal and private open spaces conveys a sense of 'ownership' and connection between the future occupants and precinct.

4.4 Regulations

There are no prescribed matters which hinder the development.

4.5 Likely Impacts

Consideration must be made to the likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.

4.5.1 Impact on the Natural Environment

The proposed development will not have an adverse impact on the natural environment. New plantings will be introduced in accordance with the proposed landscape plan. The proposed landscape plan will improve the amenity of the site and the surrounding streetscape.

4.5.2 Impact on the Built Environment

The works proposed are consistent with the relevant State and Council planning controls ensuring built form is consistent with the desired future character of the area.

4.5.3 Social and Economic Impacts on the Locality

Housing affordability in Sydney is becoming increasingly difficult to achieve. Our client is a recognised social housing provider who strive to provide for quality affordable housing developments.

It is important to acknowledge that SEPP (Affordable Rental Housing) 2009, requires that up to 50% of the dwellings be offered as affordable housing for a period of 10 years, whereas all of the proposed 63 units will be nominated as affordable housing to be managed by our client, St George Community Housing which is excess of the SEPP requirements.

The proposal therefore provides a social benefit to the community providing new, affordable accommodation in an area well serviced by public transport services and local infrastructure.

The proposed development is considered to be of a high architectural standard promoting solar access and cross ventilation. A mix of units are proposed, ranging between one and two-bedroom units including adaptable designs. The proposal therefore addresses lifestyle and affordability issues of the immediate area.

The proposal will therefore provide a positive economic impact as the site is in a location that is close to good public transport infrastructure, businesses, schools, shops and services, which benefits the future residents of the property who want to live, study, work and play in the South Western Sydney area.

4.6 Suitability of the Site

The land is appropriately zoned to permit the proposed development and meets the long-term objectives of the zone and the objectives of the Liverpool Local Environmental Plan 2008.

4.7 Submissions made in accordance with this Act or the regulations

Not relevant.

4.8 The Public Interest

The interest of the public will be served by approval of this development.

As stated, the proposed development will increase the housing choice available in this location, a location which is well serviced by public transport, services and shops. The proposal provides for

a mix of one and two-bedroom apartments, as well as adaptable apartments. The proposal will provide for a development that will consist of all 63 units being nominated as affordable housing to be managed by our client St George Community Housing assisting in addressing the growing issue of housing affordability in the Sydney Area.

The site is well serviced by public transport, making access to and from the site easy for the future occupants. Notwithstanding this, the site also provides for adequate on-site parking.

5. CONCLUSION

The proposed development has made regard to the surrounding land uses. It is considered that all reasonable measures to mitigate any adverse environmental effects have been taken into consideration in relation to the proposed residential flat building.

The proposal has been assessed in accordance with the provisions of Section 4.15 of the Environmental Planning and Assessment Act, 1979, and found to be satisfactory. The proposal is permissible with the consent of Council.

The beneficial aspects of the proposal include:

- The proposed residential units will contribute to the supply of affordable rental housing within the Liverpool local government area;
- The proposed units are well designed and provide for excellent internal amenity and outlook, whilst maintaining privacy between neighbours.
- The proposal provides for off street car parking in accordance with the provisions of SEPP (ARH) 2009, reducing the reliance of on street car parking.
- The proposed development is considered to be of a scale and mass that is consistent with the future character of the area.
- The proposal is compatible with Council's planning objectives and controls for the site and locality.

The proposed development will have no significant impact on the air or water quality in the locality.

The proposed works do not result in any unreasonable impacts to adjoining properties and are conducive to Council's policies and accordingly, it is sought that Council approve the application.

Appendix A State Environmental Planning Policy (Affordable Rental Housing) 2009

Division 1 In-Fill Affordable Housing

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
10 Development to which Division applies	• This Division applies to development for the purposes of dual occupancies, multi dwelling housing or residential flat buildings if: (a) the development concerned is permitted with consent under another environmental planning instrument, and (b) the development is on land that does not contain a heritage item that is identified in an environmental planning instrument, or an interim heritage order or on the State Heritage Register under the Heritage Act 1977.	• Complies.
	• Despite subclause (1), this Division does not apply to development on land in the Sydney region unless all or part of the development is within an accessible area.	• The site is located 370m away from an appropriately serviced bus stop on Kurrajong Road. Complies. This bus stop satisfies the accessible area criteria with the required bus services available.
	• Despite subclause (1), this Division does not apply to development on land that is not in the Sydney region unless all or part of the development is within 400 metres walking distance of land within Zone B2 Local Centre or Zone B4 Mixed Use, or within a land use zone that is equivalent to any of those zones.	• N/A.
11, 12	**(Repealed)**	• N/A.
13 Floor Space Ratios	• This clause applies to development to which this Division applies if the percentage of the gross floor area of the development that is to be used for the purposes of affordable housing is at least 20 per cent.	• All of the proposed 63 units will be used as affordable housing. Complies.
	• The maximum floor space ratio for the development to which this clause applies is the existing maximum floor space ratio for any form of residential accommodation permitted on the land on which the development is to occur, plus: (a) if the existing maximum floor space ratio is 2.5:1 or less: (i) 0.5:1—if the percentage of the gross floor area of the development that is used for affordable housing is 50 per cent or higher, or	• 1.2:1 under LLEP 08. A bonus of 0.5:1

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
	(ii) Y:1—if the percentage of the gross floor area of the development that is used for affordable housing is less than 50 per cent, where: AH is the percentage of the gross floor area of the development that is used for affordable housing. Y = AH ÷ 100 or	applies under SEPP (ARH) 2009. Therefore maximum 1.7:1. Site area: 2,782m^2 Max GFA permissible: 4,729m^2 Proposed GFA: 4,721m^2 or 1.7:1
	(b) if the existing maximum floor space ratio is greater than 2.5:1: (i) 20 per cent of the existing maximum floor space ratio—if the percentage of the gross floor area of the development that is used for affordable housing is 50 per cent or higher, or (ii) Z per cent of the existing maximum floor space ratio—if the percentage of the gross floor area of the development that is used for affordable housing is less than 50 per cent, where: AH is the percentage of the gross floor area of the development that is used for affordable housing. Z = AH ÷ 2.5	• N/A.
	• In this clause, gross floor area does not include any car parking (including any area used for car parking). **Note.** Other areas are also excluded from the gross floor area, see the definition of gross floor area contained in the standard instrument under the Standard Instrument (Local Environmental Plans) Order 2006.	
14 Standards that cannot be used to refuse consent	• **Site and solar access requirements**: A consent authority must not refuse consent to development to which this Division applies on any of the following grounds: (a) (Repealed) (b) **site area**: if the site area on which it is proposed to carry out the development is at least 450 square metres,	• 2,782m^2. Complies.
	(c) **landscaped area** if: (i) in the case of a development application made by a social housing provider—at least 35 square metres of landscaped area per dwelling is provided, or	• Variation is sought. 2,205m^2 required. 885m^2 proposed. **Refer to Part 4.1.3(a) of this SEE.**
	(ii) in any other case—at least 30 per cent of the site area is to be landscaped,	• N/A.

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
	(d) **deep soil zones** if, in relation to that part of the site area (being the site, not only of that particular development, but also of any other associated development to which this Policy applies) that is not built on, paved or otherwise sealed: (i) there is soil of a sufficient depth to support the growth of trees and shrubs on an area of not less than 15 per cent of the site area (the deep soil zone), and (ii) each area forming part of the deep soil zone has a minimum dimension of 3 metres, and (iii) if practicable, at least two-thirds of the deep soil zone is located at the rear of the site area,	• A minimum of 761m^{2}or 28%. Complies.
	(e) **solar access** if living rooms and private open spaces for a minimum of 70 per cent of the dwellings of the development receive a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter.	• 54/63 or 86%.
	• **General**: A consent authority must not refuse consent to development to which this Division applies on any of the following grounds: (a) **Parking** if: (i) in the case of a development application made by a social housing provider for development on land in an accessible area—at least 0.4 parking spaces are provided for each dwelling containing 1 bedroom, at least 0.5 parking spaces are provided for each dwelling containing 2 bedrooms and at least 1 parking space is provided for each dwelling containing 3 or more bedrooms, or	• 16 x 1 bedroom = 6.4 47 x 2 bedroom = 23.5 TOTAL REQUIRED = 29.9 TOTAL PROPOSED = 30. Complies. Refer also to submitted Traffic Report.
	(ii) in any other case—at least 0.5 parking spaces are provided for each dwelling containing 1 bedroom, at least 1 parking space is provided for each dwelling containing 2 bedrooms and at least 1.5 parking spaces are provided for each dwelling containing 3 or more bedrooms,	• N/A.
	(b) **dwelling size** if each dwelling has a gross floor area of at least: (i) 35 square metres in the case of a bedsitter or studio, or (ii) 50 square metres in the case of a dwelling having 1 bedroom, or (iii) 70 square metres in the case of a dwelling having 2 bedrooms, or (iv) 95 square metres in the case of a dwelling having 3 or more bedrooms.	• Complies.
	• A consent authority may consent to development to which this Division applies whether or not the development complies with the standards set out in subclause (1) or (2).	• Noted.
15 Design Requirements	• A consent authority must not consent to development to which this Division applies unless it has taken into consideration the provisions of the Seniors Living Policy: Urban Design Guidelines for Infill Development published by the Department of Infrastructure, Planning and Natural Resources in March 2004, to the extent that those provisions are consistent with this Policy.	• N/A. • Noted.

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
	• This clause does not apply to development to which clause 4 of the *State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development* applies.	
16 Continued application of SEPP 65	• Nothing in this policy affects the application of *State Environmental Planning Policy No 65—Design Quality of Residential Flat Development t*o any development to which this Division applies.	• Noted.
16A Character of local area	• A consent authority must not consent to development to which this Division applies unless it has taken into consideration whether the design of the development is compatible with the character of the local area.	• **Refer to Part 4.1.3(c) of this SEE.**
17 Must be used for affordable housing for 10 years	• A consent authority must not consent to development to which this Division applies unless conditions are imposed by the consent authority to the effect that: (a) for 10 years from the date of the issue of the occupation certificate: (i) the dwellings proposed to be used for the purposes of affordable housing will be used for the purposes of affordable housing, and (ii) all accommodation that is used for affordable housing will be managed by a registered community housing provider, and (b) a restriction will be registered, before the date of the issue of the occupation certificate, against the title of the property on which development is to be carried out, in accordance with section 88E of the Conveyancing Act 1919, that will ensure that the requirements of paragraph (a) are met. • Subclause (1) does not apply to development on land owned by the Land and Housing Corporation or to a development application made by, or on behalf of, a public authority.	• Noted.
18 Subdivision	• Land on which development has been carried out under this Division may be subdivided with the consent of the consent authority.	• Noted.

Appendix B 9 Principles of State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development

The following comments are provided to address the 9 Design Principles:

Principle 1 Context and Neighbourhood Character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

Comment:

The current proposal seeks the consolidation of Nos. 30, 32, 34, 36 and 38 Ironbark Avenue to facilitate the proposed residential flat building development. The development is located on the southern side of Ironbark Avenue and is bound by Kurrajong Road to the south.

Development in the area is typically low density in scale comprising a mixture single and two storey dwellings which are of an older housing stock. However, in view of the R4 High Density Residential zoning afforded to the site, the area will inevitably undergo a transition to higher density building forms.

The site is well located to local amenities and infrastructure with Daruk Park, Jardine Park, Casula Mall, Lurnea High School, Casula High School and Prestons Public School all located within walking distance of the site in proximate locations to the site. The site is also adequately serviced by public transport with regular bus services operating along Kurrajong Road, providing connections to a more expansive public transport network and linking the subject site to nearby suburbs, local amenities and services.

The proposal is considered to be an 'infill' development that responds to the desired future character of the area. Where possible, the proposal has made considerable effort to achieve the objectives and controls of the Apartment Design Guide as detailed in this Statement of Environmental Effects.

Principle 2 Built Form and Scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Comment:

The scale of the proposed development has considered the desired future character of the area and the prescriptive controls as outlined by Liverpool's planning controls and the Apartment Design Guide. The proposal is notably compliant with the applicable floor space ratio control, though a variation statement has been prepared with respect to the overall building height. The only encroachment of height occurs with the lift overrun and this is strategically located at the centre of the building to reduce visual impact.

Development in the area is generally low density residential in nature comprising of predominantly single and two storey dwellings, being typically of an older housing stock. However, given the R4 High Density Residential zone afforded to the sites and those in the surrounding area, the locality will inevitably undergo a transition to higher density residential forms, such as the one proposed.

Based on the above, the current proposal endeavours to represent a scale appropriate to the desired future character of the area as identified by the LEP and DCP. The scale of the proposal has also been carefully designed to provide a balance between the amenity for the future occupants and that of existing properties adjoining the site.

Principle 3 Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

Comment:

The subject site is afforded a maximum floor space ratio of 1:2 under the provisions of the Liverpool Local Environmental Plan 2008, with an additional 0.5:1 made available as per the development standards outlined by SEPP (Affordable Rental Housing) 2009. The proposal provides for an overall FSR of 1.7:1 which is in keeping with the numerical standard and representative of the higher densities sought within the R4 zone.

The proposed development comprises a total of 63 units, including a mix of 15 x 1-bedroom units (24%) and 48 x 2-bedroom units (78%), all of which will be made available as affordable rental housing.

The development provides for new residential accommodation in a location where there is a demand for such accommodation. The proposed 63 units sought on the site is considered to be suitable given the site is well located to public transport, shops, services and amenities and is consistent with Council's planning instruments. Proximate bus stops service the site providing for connections to more expansive public transport networks and linking the site to nearby suburbs local amenities and services as detailed in this report.

Principle 4 Sustainability

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

Comment:

The Water, Thermal and Energy performance of the proposed residential flat building has been assessed as part of the submitted BASIX certificate prepared by Northrop. Where possible, the principles of environmentally sensitive design have been incorporated into the development and is evident through the arrangement of floor plates to maximise north facing units, the prevalence of dual aspect units to obtain cross ventilation and built elements that promote natural daylight into apartments and projecting awnings/blade walls/screens that provide shading to recessed windows.

Principle 5 Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long-term management.

Comment:

Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long-term management.

A landscape plan has been prepared as part of this development application by Inview Design and is submitted under a separate cover to this Statement of Environmental Effects.

The proposal along with site appearance will be improved by the careful use of landscaping within and around the site. Deep soil areas have been incorporated throughout the perimeter if the site, allowing for plantings along the boundaries and providing for visual benefit to the street frontage. Overall, the landscaping provides for a balanced development between hard paved and soft landscaped areas throughout the site.

Principle 6 Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident wellbeing.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

Comment:

Careful consideration has been given to the orientation and positioning of the development and the design and layout of units to ensure a high level of visual and acoustic privacy is maintained between neighbouring properties. This has been further demonstrated in the architectural plans prepared by DKO Architecture.

The proposal provides future occupants with a high level of amenity in terms of solar access and good outlook to habitable areas, as well as to balconies and private open space.

Careful planning of the proposed built form provides 65% of apartments to achieve cross ventilation due to their aspect, design and internal layout planning.

The development has been formed to achieve solar access to 89% of its units, this is considered acceptable as detailed earlier in this report. Living areas and balconies have been designed with a northern orientation as much as possible with passive shading measures, such as repetitive floor plans, designed to prevent excessive heat load on apartments during the summer period.

All apartments have private balconies adjacent to living areas, consistent with this policy.

Private open space areas meet minimum sizes as nominated by ADG and are configured to be functional and conducive to recreational use. All are accessed from living areas.

All dwellings achieve 2700mm ceiling heights to all habitable rooms. Generous amount of private storage is provided for each dwelling.

Other amenity issues include the provision of lifts servicing all floors of the development. Seven adaptable units with associated parking spaces are also provided.

Principle 7 Safety

Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

Comment:

The proposed development has had regard to the principles of 'Safer by Design'. Aspects such as natural surveillance and controlled access have all been taken into consideration.

The proposed development has made provisions for natural surveillance for both communal and public areas. The common areas will be appropriately lit to ensure safety and visibility after dark.

The entrance to the development, including private entries to the ground floor dwellings, are clearly visible from the street. Access to the building will be through a controlled security system. An intercom system will be provided adjacent to the main entry lobby for visitor access. All common areas will be covered by CCTV.

The street numbering and the identification of the building will be clear to prevent unintended access and to assist persons trying to find the building.

Principle 8 Housing Diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.

Comment:

Housing affordability in Sydney is becoming increasingly difficult. Our client is a recognised social housing provider who strive to provide for quality affordable housing developments.

The building itself integrates a number of sustainable features exceeding the minimum standards prescribed by BASIX.

It is important to acknowledge that unlike SEPP (Affordable Rental Housing) 2009, which requires that up to 50% of the dwellings be offered as affordable housing for a period of 10 years, all of the proposed 63 units will be nominated as affordable housing to be managed by our client, St George Community Housing.

The proposal therefore provides a social benefit to the community providing for new, affordable accommodation in an area well serviced by public transport services and local infrastructure.

The proposed development is considered to be of a high architectural standard promoting solar access and cross ventilation. A mix of units is proposed ranging between one and two-bedroom units.

As part of the submitted application, the 2-bedroom layouts have been designed to demonstrate how 2 single beds could be incorporated to accommodate a family. In this regard, the proposal promotes flexible living conditions to accommodate different households.

The proposal therefore addresses lifestyle and affordability issues of the immediate area.

Principle 9 Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

Comment:

It is considered that the proposed development incorporates the composition of building elements, textures, materials and finishes which all contribute to an overall high quality and aesthetically appealing development. The location of the site, and bulk and scale of surrounding existing and potential future developments have been considered in the design of the development. The internal functions and structure have been clearly expressed through the articulation and massing of the facades.

Design Verification Statement:

A Design Verification Statement has been prepared by DKO Architecture and is submitted with this development application in accordance with State Environmental Planning Policy No. 65.

Further to the above design quality principles, Clause 30(2) of State Environmental Planning Policy No. 65 also requires residential apartment development to be designed in accordance with the Department of Planning's publication entitled *Apartment Design Guide*. The following table outlines compliance with the Apartment Design Guide, where numerical requirements are specified.

Appendix C State Environmental Planning Policy No. 65 – Apartment Design Guide

STANDARD	OBJECTIVE	COMPLIANCE
Site Analysis	3A-1 - Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.	Reference should be made to Drawing No. TP100 prepared by DKO.
Orientation	3B-1 - Building types and layouts respond to the streetscape and site while optimising solar access within the development.	Complies.
	3B-2 - Overshadowing of neighbouring properties is minimised during mid-winter.	Complies. **Refer to Part 4.1.5 (b) of this SEE.**
Public Domain Interface	3C-1 – Transition between private and public domain is achieved without compromising safety and security.	Complies. Ground levels will be provided with direct access to Ironbark Avenue.
	3C-2 – Amenity of the public domain is retained and enhanced.	Complies.
Communal And Public Open Space	3D-1 – An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping *Design criteria:* Communal open space has a minimum area equal to 25% of the site (see figure 3D.3) Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3pm on 21 June (mid winter).	 713m^2 or 26%. Complies. Complies.
	3D-2 – Communal open space is design to allow for a range of activities, respond to site conditions and be attractive and inviting.	Complies.
	3D-3 – Communal open space is designed to maximise safety.	Complies.
	3D-4 – Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood.	N/A.

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td>Deep Soil Zones</td><td>3E-1 - Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality

Design criteria:
Deep soil zones are to meet the following minimum requirements:
<table>
<tr><th>Site area</th><th>Minimum dimensions</th><th>Deep soil zone (% of site area)</th></tr>
<tr><td>less than 650m²</td><td>-</td><td rowspan="4">7%</td></tr>
<tr><td>650m² - 1,500m²</td><td>3m</td></tr>
<tr><td>greater than 1,500m²</td><td>6m</td></tr>
<tr><td>greater than 1,500m² with significant existing tree cover</td><td>6m</td></tr>
</table>
</td><td>Minimum required: 194m², 6m dimension.

At least 375m² is provided or 13.48% of the site has been provided as deep soil planting with minimum dimension of 6m. This located along the western and southern setback.</td></tr>
<tr><td>Visual Privacy</td><td>3F-1 - Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy

Design criteria:
Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances between building to the side and rear boundaries are as follows:
<table>
<tr><th>Building height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th></tr>
<tr><td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr>
<tr><td>up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr>
<tr><td>over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr>
</table>
Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)

Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties.</td><td>Refer to Part 4.1.5(b) of this SEE.</td></tr>
</table>

STANDARD	OBJECTIVE	COMPLIANCE
	3F-2 - Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.	Complies.
Pedestrian Access And Entries	3G-1 - Building entries and pedestrian access connects to and addresses the public domain.	Complies. Ground levels will be provided with direct access from Ironbark Avenue.
	3G-2 - Access, entries and pathways are accessible and easy to identify.	Complies.
	3G-3 - Large sites provide pedestrian links for access to streets and connection to destinations	N/A
Vehicle Access	3H-1 - Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.	Complies.
Bicycle And Car Parking	3J-1 - Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas *Design criteria:* *For development in the following locations:* *on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or* *on land zoned, and sites within 400 metres of land zoned, b# Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre* *the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less* *The car parking needs for a development must be provided off street.*	Complies. Refer to comments under SEPP (ARH) 2009 and the submitted Traffic Report attached under a separate cover.
	3J-2 – Parking and facilities are provided for other modes of transport	Refer to Traffic Report.
	3J-3 – Car park design and access is safe and secure.	Complies.
	3J-4 – Visual and environmental impacts of underground car parking are minimised.	N/A
	3J-5 – Visual and environmental impacts of on-grade car parking are minimised.	Complies.
	3J-6 – Visual and environmental impacts of above ground enclosed car parking are minimised	N/A

STANDARD	OBJECTIVE	COMPLIANCE
Solar And Daylight Access	4A-1 - To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space. *Design criteria:* *Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas*	Complies. 54/63 or 86%.
	In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid winter	N/A
	A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter	Complies. 9/63 units or 14%
	4A-2 – Daylight access is maximised where sunlight is limited.	Complies.
	4A-3 – Design incorporates shading and glare control, particularly for warmer months.	Complies. Refer to BASIX.
Natural Ventilation	4B-1 – All habitable rooms are naturally ventilated.	Complies.
	4B-2 – The layout and design of single aspect apartments maximises natural ventilation.	Complies.
	4B-3 - The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents *Design criteria:* *At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed* *Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.*	40/63 or 63%. Complies.
Ceiling Heights	4C-1 - Ceiling height achieves sufficient natural ventilation and daylight access *Design criteria:* *Measured from finished floor level to finished ceiling level, minimum ceiling heights are:*	Complies.

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>
<table>
<tr><th colspan="2">Minimum ceiling height
for apartment and mixed use buildings</th></tr>
<tr><td>Habitable rooms</td><td>2.7m</td></tr>
<tr><td>Non-habitable</td><td>2.4m</td></tr>
<tr><td>For 2 storey apartments</td><td>2.7m for main living area floor
2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr>
<tr><td>Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope</td></tr>
<tr><td>If located in mixed used areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr>
</table>
These minimums do not preclude higher ceilings if desired.
</td><td></td></tr>
<tr><td></td><td>4C-2 - Ceiling height increases the sense of space in apartments and provides for well proportioned rooms.</td><td>Complies.</td></tr>
<tr><td></td><td>4C-3 - Ceiling heights contribute to the flexibility of building use over the life of the building.</td><td>Complies.</td></tr>
<tr><td>Apartment Size And Layout</td><td>4D-1 - The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.

Design criteria:
Apartments are required to have the following minimum internal areas:
<table>
<tr><th>Apartment type</th><th>Minimum internal area</th></tr>
<tr><td>Studio</td><td>35m²</td></tr>
<tr><td>1 bedroom</td><td>50m²</td></tr>
<tr><td>2 bedroom</td><td>70m²</td></tr>
<tr><td>3 bedroom</td><td>90m²</td></tr>
</table>
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each.
A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each.
Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms</td><td>Complies.
Refer to comments under SEPP (ARH) 2009.</td></tr>
<tr><td></td><td>4D-2 – Environmental performance of the apartment is maximised.</td><td>Refer to submitted plans.</td></tr>
</table>

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>Design criteria:
Habitable room depths are limited to a maximum of 2.5 x the ceiling height
In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.</td><td></td></tr>
<tr><td></td><td>4D-3 – Apartment layouts are designed to accommodate a variety of household activities and needs

Design criteria:
Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)
Bedrooms have a minimum dimension of 3m (excluding wardrobe space)
Living rooms or combined living/dining rooms have a minimum width of:
3.6m for studio and 1 bedroom apartments
4m for 2 and 3 bedroom apartments
The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.</td><td>Refer to submitted plans.</td></tr>
<tr><td>Private Open Space And Balconies</td><td>4E-1 – Apartments provide appropriately sized private open space and balconies to enhance residential amenity.

Design criteria:
All apartments are required to have primary balconies as follows:
<table>
<tr><th>Dwelling type</th><th>Minimum area</th><th>Minimum depth</th></tr>
<tr><td>Studio apartments</td><td>4m²</td><td>-</td></tr>
<tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr>
<tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr>
<tr><td>3+ bedroom apartments</td><td>12m²</td><td>2.4m</td></tr>
</table>
The minimum balcony depth to be counted as contributing to the balcony area is 1m.
For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m.</td><td>Complies.</td></tr>
<tr><td></td><td>4E-2 - Primary private open space and balconies are appropriately located to enhance liveability for residents.</td><td>Complies.</td></tr>
<tr><td></td><td>4E-3 - Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building.</td><td>Complies.</td></tr>
</table>

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>4E-4 - Private open space and balcony design maximises safety</td><td>Complies.</td></tr>
<tr><td rowspan="2">Common Circulation And Spaces</td><td>4F-1 - Common circulation spaces achieve good amenity and properly service the number of apartments

Design criteria:
The maximum number of apartments off a circulation core on a single level is eight.
For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.</td><td>Complies.
Max 8.</td></tr>
<tr><td>4F-2 - Common circulation spaces promote safety and provide for social interaction between residents</td><td>Complies.</td></tr>
<tr><td rowspan="2">Storage</td><td>4G-1 - Adequate, well designed storage is provided in each apartment

Design criteria:
In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:

<table><tr><th>Dwelling type</th><th>Storage size volume</th></tr><tr><td>Studio apartments</td><td>4m³</td></tr><tr><td>1 bedroom apartments</td><td>6m³</td></tr><tr><td>2 bedroom apartments</td><td>8m³</td></tr><tr><td>3+ bedroom apartments</td><td>10m³</td></tr></table>At least 50% of the required storage is to be located within the apartment.</td><td>Complies.
Adequate storage is provided for each unit, with at least 50% of the required storage located within the apartment.</td></tr>
<tr><td>4G-2 - Additional storage is conveniently located, accessible and nominated for individual apartments.</td><td>Complies.</td></tr>
<tr><td rowspan="2">Acoustic Privacy</td><td>4H-1 - Noise transfer is minimised through the siting of buildings and building layout</td><td>Complies.</td></tr>
<tr><td>4H-2 - Noise impacts are mitigated within apartments through layout and acoustic treatments.</td><td>Complies.
Refer to Acoustic Report.</td></tr>
<tr><td rowspan="2">Noise And Pollution</td><td>4J-1 - In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings.</td><td>Complies.
Refer to Acoustic Report</td></tr>
<tr><td>4J-2 - Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.</td><td>Complies.
Refer to Acoustic Report.</td></tr>
</table>

STANDARD	OBJECTIVE	COMPLIANCE
Apartment Mix	4K-1 - A range of apartment types and sizes is provided to cater for different household types now and into the future.	Complies. The two bedroom units have been designed to show how 2 single beds can be accommodated demonstrating a family arrangement.
	4K-2 - The apartment mix is distributed to suitable locations within the building.	Complies.
Ground Floor Apartments	4L-1 - Street frontage activity is maximised where ground floor apartments are located	Complies.
	4L-2 - Design of ground floor apartments deliver amenity and safety for residents	Complies.
Facades	4M-1 - Building facades provide visual interest along the street while respecting the character of the local area.	Complies.
	4M-2 - Building functions are expressed by the façade.	Complies.
Roof Design	4N-1 – Roof treatments are integrated into the building design and positively respond to the street.	Complies.
	4N-2 - Opportunities to use roof space for residential accommodation and open space are maximised	N/A
	4N-3 – Roof design incorporates sustainability features.	None proposed.
Landscape Design	4O-1 – Landscape design is viable and sustainable	Complies. Refer to Landscape Plan.
	4O-2 – Landscape design contributes to the streetscape and amenity.	Complies. Refer to Landscape Plan.
Planting On Structures	4P-1 – Appropriate soil profiles are provided.	Complies. Refer to Landscape Plan.
	4P-2 – Plant growth is optimised with appropriate selection and maintenance.	Complies. Refer to Landscape Plan.
	4P-3 - Planting on structures contributes to the quality and amenity of communal and public open spaces	Complies.

STANDARD	OBJECTIVE	COMPLIANCE
		Refer to Landscape Plan.
Universal Design	4Q-1 - Universal design features are included in apartment design to promote flexible housing for all community members.	Complies. Refer to Access Report.
	4Q-2 - A variety of apartments with adaptable designs are provided.	Eight (7) adaptable units are proposed in total (spread over Levels 1 – 4).
	4Q-3 - Apartment layouts are flexible and accommodate a range of lifestyle needs.	As detailed, the proposed two-bedroom apartments have been shown to accommodate two single beds to cater to families.
Adaptive Reuse	4R-1 - New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place.	N/A
	4R-2 - Adapted buildings provide residential amenity while not precluding future adaptive reuse.	N/A
Mixed Use	4S-1 - Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.	N/A
	4S-2 - Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents.	N/A
Awnings And Signage	4T-1 - Awnings are well located and complement and integrate with the building design.	N/A
	4T-2 - Signage responds to the context and desired streetscape character.	N/A
Energy Efficiency	4U-1 - Development incorporates passive environmental design.	Complies.
	4U-2 - Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.	Complies.
	4U-3 - Adequate natural ventilation minimises the need for mechanical ventilation.	Complies.

STANDARD	OBJECTIVE	COMPLIANCE
Water Management And Conservation	4V-1 - Potable water use is minimised.	Water efficient fixtures are specified by the submitted BASIX certificate.
	4V-2 - Urban stormwater is treated on site before being discharged to receiving waters.	Complies Refer to submitted Stormwater Plan.
	4V-3 – Flood management systems are integrated into site design.	Complies. Refer to submitted Stormwater Plan.
Waste Management	4W-1 - Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.	Complies. Waste Management Plan to confirm.
	4W-2 - Domestic waste is minimised by providing safe and convenient source separation and recycling.	Complies. Waste Management Plan to confirm.
Building Maintenance	4X-1 – Building design detail provides protection from weathering.	Complies.
	4X-2 – Systems and access enable ease of maintenance.	Complies.
	4X-3 – Material selection reduces ongoing maintenance costs.	Complies.

Appendix D Liverpool Local Environmental Plan 2008

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
Zoning	• Zone R4 High Density Residential *"2 Permitted without consent* *Home-based child care; Home occupations* *3 Permitted with consent* *Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Dwelling houses; Educational establishments; Environmental facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Home businesses; Home industries; Hostels; Hotel or motel accommodation; Kiosks; Multi dwelling housing; Neighbourhood shops; Places of public worship; Public administration buildings; Recreation areas; Residential care facilities; Residential flat buildings; Respite day care centres; Roads; Secondary dwellings; Serviced apartments; Shop top housing* *4 Prohibited* *Any development not specified in item 2 or 3".*	Residential flat building is proposed. Complies. **Refer to Part 4.1.3(a) of this SEE.**
Clause 2.7 Demolition	• Development consent required.	Demolition of all existing structures is proposed.
Clause 4.1 Minimum Subdivision Lot Size	• 1,000m^2	2,782m^2 Complies.
Cl 4.3 Height of Buildings	• 18m.	Maximum 19m proposed. Variation is sought. **Refer to Part 4.1.3(b) of this SEE and accompanying Cl. 4.6 Variation Statement.**
Cl 4.4 Floor Space Ratio	• 1.2:1 under LLEP 08.	Site area: 2,782m^2

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
	A bonus of 0.5:1 applies under SEPP (ARH) 2009. Therefore maximum 1.7:1.	Max GFA permissible: 4,729m^2 Proposed GFA: 4,721m^2 or 1.71:1.
Cl 5.10 Heritage Conservation	• The objectives of this clause are as follows: ○ to conserve the environmental heritage of Liverpool, ○ to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views, ○ to conserve archaeological sites, ○ to conserve Aboriginal objects and Aboriginal places of heritage significance.	N/A.
Cl 7.6 Environmentally Significant Land	• Before determining an application to carry out development on environmentally significant land, the consent authority must consider such of the following as are relevant: (a) the condition and significance of the vegetation on the land and whether it should be substantially retained in that location, (b) the importance of the vegetation in that particular location to native fauna, (c) the sensitivity of the land and the effect of clearing vegetation, (d) the relative stability of the bed and banks of any waterbody that may be affected by the development, whether on the site, upstream or downstream, (e) the effect of the development on water quality, stream flow and the functions of aquatic ecosystems (such as habitat and connectivity), (f) the effect of the development on public access to, and use of, any waterbody and its foreshores.	N/A.
Cl 7.7 Acid Sulfate Soils	• The objective of this clause is to ensure that development not disturb, expose or drain acid sulfate soils and cause environmental damage.	N/A.
Cl 7.8 Flood Planning	• This clause applies to land at or below the flood planning level.	N/A.
Cl 7.14 Minimum building street frontage	• A residential flat building requires a street frontage of at least 24 metres to a public street (excluding service lanes).	80.02 metres along Ironbark Avenue. Complies.

Appendix E Liverpool Development Control Plan 2008

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
Part 1 General Controls for all Development		
Tree Preservation	• Any approvals to remove or prune trees issued with a development consent shall lapse when the development consent lapses or becomes invalid or void. • Council may refuse an application to remove a tree(s) under certain circumstances (refer to clause) but may give conditional consent for the appropriate remedial "branch or root pruning" for that tree(s). • An application to remove a tree may consented to by Council under certain circumstances (refer to clause). • Applications for trees that have Aboriginal marking and/or constitute an item of Aboriginal significance shall be referred to DECC. • Pruning must accord with AS 4373/2007. • All existing indigenous trees shall be retained or replaced. Where approval is given to remove trees, appropriate replacement planting will be required. • Significant trees that are identified as having habitat value shall not be relocated or removed.	• Refer to Arboricultural Report.
Landscaping And Incorporation Of Existing Trees	• Existing trees and native vegetation are to be retained, protected and incorporated into the development proposal. • Prior to the commencement of the design of a development existing trees should be identified. The design of the development should consider options to retain existing trees • Existing indigenous trees within any building setback should be retained where possible, as an integral component of the site's landscaping, and to protect local habitats. • Prior to the commencement of the design of a development existing street trees should be identified. The design of a development should consider options to retain existing street trees.	• Refer to Arboricultural Report.
Bushland And Fauna Habitat Preservation	• Refer to DCP.	• N/A.
Bushfire Risk	• Construction of single dwellings on or adjacent to bushfire prone land is to be carried out in accordance NSW Rural Fire Service's Single Dwelling Application Kit • All development shall comply with provisions of the Rural Fires and Assessment Act 2002 and Planning for Bushfire Protection 2006 • Asset Protection Zones shall be provided within the boundary of the land on which a development is proposed but may include public streets located between the land and bushland.	• N/A.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
Water Cycle Management	• For developments that require construction of stormwater drainage, a SDCP shall be submitted with the Development Application demonstrating the feasibility of the proposed drainage system within the site and connection to Council's system.	• Complies. Refer to Stormwater Plan.
Development Near A Watercourse	• If any works are proposed near a water course, the Water Management Act 2000 may apply, and you may be required to seek controlled activity approval from the NSW Office of Water.	• N/A.
Erosion And Sediment Control	• The development application shall be accompanied by either a Soil and Water Management Plan (SWMP) or an Erosion and Sediment Control Plan (ESCP) as shown in Table 1.	• Complies. Refer to Erosion & Sediment Control Plan.
Flooding Risk	• Reduce the risk to human life and damage to property caused by flooding through controlling development on land affected by potential floods.	• N/A.
Contaminated Land Risk	• To identify the presence of contamination at an early stage of the development process and to manage the issues of land contamination to ensure protection of the environment and that of human health is maintained. • Ensure that proposed developments or changes of land use will not increase the risk to human health or the environment	• Complies. Refer to Section 4.1.4 of this report.
Salinity Risk	• To prevent further spread of urban salinity and remedy, where possible, existing areas of salinity.	• N/A
Acid Sulfate Soils Risk	• Identify areas of acid sulfate soil risk to prevent any unnecessary impact on the environment.	• N/A
Demolition Of Existing Developments	• All demolition work must comply with the *Australian Standard AS2601 – 1991, The Demolition of Structures*.	• Complies.
Aboriginal Archaeology	• Identify and where possible preserve relics of the occupation of the land by Aboriginal communities	• N/A
Heritage And Archaeological Sites	• Conserve the heritage significance of heritage items and heritage conservation areas of Liverpool including associated fabric, setting, curtilage and views; and conserve archaeological sites.	• N/A
Subdivision Of Land And Buildings	• Refer to DCP.	• N/A
Water Conservation	• New dwellings, including a residential component within a mixed-use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with *State Environmental Planning Policy – Building Sustainability Index (BASIX)*.	• Refer to submitted BASIX Certificate.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
Energy Conservation	• Dwellings, including multi-unit development within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with *State Environmental Planning Policy – Building Sustainability Index (BASIX).* A complying BASIX report is to be submitted with all development applications containing residential activities.	• Refer to submitted BASIX Certificate.
Waste Disposal & Re-Use Facilities	• A Waste Management Plan (WMP) shall be submitted with a Development Application for any activities generating waste, and be provided in three sections: - Demolition - Construction - On-going waste management. • In the case of multi dwelling housing of 9 or more dwellings and residential flat buildings one or more garbage and recycling enclosures (bin bays) are to be provided within the site. • Bin bays or waste service rooms are to be sufficiently open and well lit. • A hose cock for hosing the garbage bin bay and a sewered drainage point are to be provided in or adjacent to the bin storage area. • Bin bays are to be adjacent to a street frontage, or if not possible then at a designated point adjacent to the common access driveway provided sufficient level areas (<5% grade) is available for bin collection. The bin bay is to be located so that distance from bin bay to the nearest waste collection point accessible by the collection vehicle is no further than 15m. The bin bay position is to minimise noise impacts on residents from the usage of bins and waste or recycling collection.	• Complies. Refer to Waste Management Plan.
Outdoor Advertising And Signage	• Refer to DCP provisions.	• N/A.
Social Impact Assessment	• A social impact assessment shall be submitted with a development application for all types of development listed in Table 21. The social impact assessment shall take the form of a Social Impact Comment or a Comprehensive Social Impact Assessment, as specified in Table 21.	• **Refer to Part 4.3.1(a) of this SEE.**
Part 3.7 Residential Flat Buildings in the R4 Zone (Outside of Liverpool City Centre)		
Frontage And Site Area	• Minimum lot width: 24m. • Minimum site area: Refer to LLEP08.	• 80.02m. Complies. • 1,000m^2 required. 2,782m^2 proposed. Complies.
Site Planning	• The building should relate to the site's topography with minimal earthworks, except for basement car parking.	• Minor cut and fill works are proposed. There is no proposed

<table>
<tr><th>CHAPTER/ PLANNING GUIDELINE</th><th>DEVELOPMENT STANDARD/CONTROL</th><th>COMPLY</th></tr>
<tr><td></td><td>• Siting of buildings should provide usable and efficient spaces, with consideration given to energy efficiency in the building design.
• Site layout should provide safe pedestrian, cycle and vehicle access to and from the street.
• Siting of buildings should be sympathetic to surrounding development, taking specific account of the streetscape in terms of scale, bulk, setbacks, materials and visual amenity.
• Stormwater from the site must be able to be drained satisfactorily. Where the site falls away from the street, it may be necessary to obtain an easement over adjoining property to drain water satisfactorily to a Council stormwater system. Where stormwater drains directly to the street, there may also be a need to incorporate on-site detention of stormwater where street drainage is inadequate. Refer to Water cycle management in Part 1.
• The development will need to satisfy the requirements of State Environmental Planning Policy No 65— Design Quality of Residential Flat Development.
Note: A Site Analysis Plan is required for each development application.</td><td>basement. Refer to geotechnical report.
• Where possible, units are orientated to the north.
• Separate vehicle and pedestrian access points are proposed.
• Complies as detailed in this SEE.
• Complies. Stormwater plans to confirm.
• Refer to Appendix B of this report.
• Complies.</td></tr>
<tr><td>Setbacks</td><td>Front and Secondary Setbacks:
Table 1
<table><tr><th>Road</th><th>Front Setback</th><th>Secondary Setback</th></tr><tr><td>Classified Roads</td><td>7.0m</td><td>7.0m</td></tr><tr><td>Other Streets</td><td>5.5m</td><td>5.5m</td></tr></table>• Verandahs, eaves and other sun control devices may encroach on the front and secondary setback by up to 1m.
• The secondary setback is along the longest length boundary.</td><td>• Complies. A minimum Front setback of 5.5m is proposed. Minor protrusions of 1m are contained to proportions of balconies and are permitted to encroach up to 1m into this front setback.</td></tr>
</table>

<table>
<tr><th>CHAPTER/ PLANNING GUIDELINE</th><th>DEVELOPMENT STANDARD/CONTROL</th><th>COMPLY</th></tr>
<tr><td></td><td>Side and Rear Setbacks:

Table 2
<table><tr><th>Item</th><th>Side Setback</th><th>Rear Setback</th></tr><tr><td>Boundary to land in R2 & R3 zones</td><td>10m</td><td>10m</td></tr><tr><td>Boundary to land in R2 & R3 zones (no windows to habitable rooms)</td><td>10m</td><td>10m</td></tr><tr><td>Boundary to land in R4 zone (First 10m in height, excluding roof/attic)</td><td>3m</td><td>8m</td></tr><tr><td>Boundary to land in R4 zone (Greater than 10m in height)</td><td>8m</td><td>8m</td></tr><tr><td>Boundary to public open space</td><td>6m</td><td>6m</td></tr></table>• Consideration will need to be given to existing and approved setbacks of residential flat buildings on adjoining buildings.</td><td>• Refer to comments made under SEPP 65/ADG.</td></tr>
<tr><td>Landscaped Area And Private Open Space</td><td>Landscaped area (deep soil area):
• A minimum of 25% of the site area shall be landscaped area.
• A minimum of 50% of the front setback area shall be landscaped area.
• Optimise the provision of consolidated landscaped area within a site by:
o The design of basement and sub-basement car parking, so as not to fully cover the site.
o The use of front and side setbacks.
o Optimise the extent of landscaped area beyond the site boundaries by locating them contiguous with the landscaped area of adjacent properties.
• Promote landscape health by supporting for a rich variety of vegetation type and size.
• Increase the permeability of paved areas by limiting the area of paving and/or using pervious paving materials.</td><td>• Refer to comments under SEPP (ARH) 2009.
• Complies.
• No basement level proposed.
• Complies.
• Complies.
• Complies.
• Refer to comments under SEPP 65/ADG.</td></tr>
</table>

<table>
<tr><th>CHAPTER/ PLANNING GUIDELINE</th><th>DEVELOPMENT STANDARD/CONTROL</th><th>COMPLY</th></tr>
<tr><td></td><td>

Open Space

- Provide communal open space, which is appropriate and relevant to the context and the building's setting.
- Where communal open space is provided, facilitate its use for the desired range of activities by:
  - Locating it in relation to buildings to optimise solar access to dwellings.
  - Consolidating open space on the site into recognisable areas with reasonable space, facilities and landscape.
  - Designing its size and dimensions to allow for the range of uses it will contain.
  - Minimising overshadowing.
  - Carefully locating ventilation duct outlets from basement car parking.
- Locate open space to increase the potential for residential amenity.

Private Open Space

Table 3

Dwelling Size	Private Open Space Area	Minimum Width
Small < 65 sqm	10sqm	2m
Medium 65 – 100	12sqm	2m
Large > 100 sqm	12sqm	2m

- Private open space may be provided as a courtyard for ground floor dwellings or as balconies for dwellings above the ground floor
- Private open space areas should be an extension of indoor living areas and be functional in size to accommodate seating and the like.
- Private open space should be clearly defined for private use.

Drying Areas

- Clothes drying facilities must be provided at a rate of 5 lineal m of line per unit. Clothes drying areas should not be visible from a public place and should have solar access.

</td><td>

- Refer to comments under SEPP 65/ADG.

- Refer to submitted plans. Drying areas

</td></tr>
</table>

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		are proposed to the balconies.
Building Design, Streetscape And Layout	**Building Height** • Refer to LLEP08. **Building Appearance and Streetscape** • Residential Flat Buildings shall comply with State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development, and should consider the Residential Flat Design Code. • Building facades shall be articulated and roof form is to be varied to provide visual variety. • The pedestrian entrance to the building shall be emphasised. • A sidewall must be articulated if the wall has a continuous length of over 14 m. • Where possible vehicular entrances to the basement car parking shall be from the side of the building. As an alternative a curved driveway to an entrance at the front of the building may be considered if the entrance is not readily visible from the street. • Driveway walls adjacent to the entrance of a basement car park are to be treated so that their appearance is consistent with the basement or podium walls. • Sensitive design of basement car parking areas can assist in ensuring that podiums and vehicle entry areas do not dominate the overall design of the building or the streetscape and optimise areas for deep soil planting. • The integration of podium design should be an integral part of the design of the development, and as far as possible should not visibly encroach beyond the building footprint. • A master antenna shall be provided for any development of more than three dwellings and be located so that it is not visible from the street or any public open space. • Consider the relationship between the whole building form and the facade and /or building elements. The number and distribution of elements across a façade determine simplicity or complexity. Columns, beams, floor slabs, balconies, window openings and fenestrations, doors, balustrades, roof forms and parapets are elements, which can be revealed or concealed and organised into simple or complex patterns.	• Variation is sought. Refer to Part 4.1.6(b) of this SEE. • Refer to Appendix B of this report. • Complies. Refer to Part 3 of this report. • A clearly defined landscaped path is proposed to the front lobby areas. • No blank side wall will exceed 14m in length. • N/A. • N/A. • N/A. • Complies. • This may be conditioned. • The proposed building is of a modern design which has been reflected

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	• Compose facades with an appropriate scale, rhythm and proportion, which respond to the building's use and the desired contextual character. This may include but are not limited to: ○ Defining a base, middle and top related to the overall proportion of the building. ○ Expressing key datum lines in the context using cornices, a change in materials or building set back ○ Expressing the internal layout of the building, for example, vertical bays or its structure, such as party wall-divisions. ○ Expressing the variation in floor-to-floor height, particularly at the lower levels. ○ Articulating building entries with awnings, porticos, recesses, blade walls and projecting bays. ○ Selecting balcony types which respond to the street context, building orientation and residential amenity. ○ Cantilevered, partially recessed, wholly recessed, or Juliet balconies will all create different facade profiles. ○ Detailing balustrades to reflect the type and location of the balcony and its relationship to the façade detail and materials. • Design facades to reflect the orientation of the site using elements such as sun shading, light shelves and bay windows as environmental controls, depending on the facade orientation. • Express important corners by giving visual prominence to parts of the facade, for example, a change in building articulation, material or colour, roof expression or increased height. • Co-ordinate and integrate building services, such as drainage pipes, with overall facade and balcony design. • Co-ordinate security grills/screens, ventilation louvres and car park entry doors with the overall facade design **Roof Design** • Relate roof design to the desired built form. This may include: ○ Articulating the roof, or breaking down its massing on large buildings, to minimise the apparent bulk or to relate to a context of smaller building forms. ○ Using a similar roof pitch or material to adjacent buildings, particularly in existing special character areas or heritage conservation areas.	through material selection. • Facades have been designed to perpetuate a rhythm and proportion which is compatible with the local context and modern development in the locality. Buildings have been well articulated, offering a degree of visual interest and providing delineation between levels. • Refer to comments under Appendix C of this report. • The site is not a corner property. • Capable of being complied with. • N/A. • The proposal includes a flat roof form to complement the

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	○ Minimising the expression of roof forms gives prominence to a strong horizontal datum in the adjacent context, such as an existing parapet line. ○ Using special roof features, which relate to the desired character of an area, to express important corners. • Design the roof to relate to the size and scale of the building, the building elevations and three-dimensional building form. This includes the design of any parapet or terminating elements and the selection of roof materials. • Design roofs to respond to the orientation of the site, for example, by using eaves and skillion roofs to respond to sun access. • Minimise the visual intrusiveness of service elements by integrating them into the design of the roof. These elements include lift over-runs, service plants, chimneys, vent stacks, telecommunication infrastructures, gutters, downpipes and signage. • Where habitable space is provided within the roof optimise residential amenity in the form of attics or penthouse dwellings. **Building Entry** • Improve the presentation of the development to the street by: ○ Locating entries so that they relate to the existing street and subdivision pattern, street tree planting and pedestrian access network. ○ Designing the entry as a clearly identifiable element of the building in the street. ○ Utilising multiple entries-main entry plus private ground floor dwelling entries-where it is desirable to activate the street edge or reinforce a rhythm of entries along a street. • Provide as direct a physical and visual connection as possible between the street and the entry. • Achieve clear lines of transition between the public street, the shared private, circulation spaces and the dwelling unit.	modern form of the building. • The lift overrun will centred over the building to minimise its visibility. • N/A. • The development provides for multiple entries including private entrance to ground floor dwellings. • Pedestrian paths are clearly defined through paved pathways and breaks in the landscaping. • The proposed landscaping and building finishes will clearly articulate the

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	• Ensure equal access for all.
	
	• Provide safe and secure access by:
	  ○ Avoiding ambiguous and publicly accessible small spaces in entry areas.
	  ○ Providing a clear line of sight between one circulation space and the next.
	  ○ Providing sheltered well-lit and highly visible spaces to enter the building, meet and collect mail.
	• Generally provide separate entries from the street for:
	  ○ Pedestrians and cars.
	  ○ Different uses, for example, for residential and commercial users in a mixed use development.
	  ○ Ground floor dwellings, where applicable.
	• Design entries and associated circulation space of an adequate size to allow movement of furniture between public and private spaces.
	• Provide and design letterboxes to be convenient for residents and not to clutter the appearance of the development from the street by:
	  ○ Locating them adjacent to the major entrance and integrated into a wall, where possible.
	  ○ Setting them at 90 degrees to the street, rather than along the front boundary.
	
	Balconies
	• Balconies may project up to 1m from the façade of a building.
	
	• Balustrades must be compatible with the façade of the building.
	
	• Ensure balconies are not so deep that they prevent sunlight entering the dwelling below.
		different zones across the site.
		• The proposal includes two lifts servicing all levels.
		• Communal areas may be accessed via clear, direct paths and will be well lit.
		• Complies.
		
		• Complies.
		
		• Complies.
		
		• Balconies have been designed in accordance with ADG requirements.
		• Brick, concrete, metal and glass of various tones/colours are proposed in keeping with the modern architecture of the building.
		• Varied floor plates are provided with the

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	• Design balustrades to allow views and casual surveillance of the street. • Balustrades on balconies at lower levels shall be of solid construction. • Balconies should where possible should be located above ground level to maximise privacy for occupants, particularly from the street. • Solid or semi solid louvres are permitted. • Noise attenuation measures on balconies facing a Classified Road should be considered. • Balconies should be located on the street frontage, boundaries with views and onto a substantial communal open space. • Primary balconies should be: ○ Located adjacent to the main living areas, such as living room, dining room or kitchen to extend the dwelling living space; ○ Sufficiently large and well proportioned to be functional and promote indoor/outdoor living. A dining table and two chairs (smaller dwelling) and four chairs (larger dwelling) should fit on the majority of balconies in any development. • Consider secondary balconies, including Juliet balconies or operable walls with balustrades, for additional amenity and choice in larger dwellings, adjacent to bedrooms or for clothes drying, site balconies off laundries or bathrooms. • Design and detail balconies in response to the local climate and context thereby increasing the usefulness of balconies. This may be achieved by: ○ Locating balconies facing predominantly north, east or west to provide solar access. ○ Utilising sunscreens, pergolas, shutters and operable walls to control sunlight and wind. ○ Providing balconies with operable screens, Juliet balconies or operable walls/sliding doors with a balustrade in special locations where noise or high winds prohibit other solutions - along rail corridors, on busy roads or in tower buildings - choose cantilevered balconies, partially cantilevered balconies and/or recessed balconies in response to daylight, wind, acoustic privacy and visual privacy. • Provide primary balconies for all dwellings with a minimum depth of 2m. • Ensuring balconies are not so deep that they prevent sunlight entering the dwelling below.	exception of Levels 1, 2 and 3. • Complies. • Refer to comments above. • Complies. units provide for ground level courtyards. • Complies. • N/A. • Balconies are predominantly orientated to the front and rear of the site. • Complies. • Balconies are designed as per ADG requirements. • None proposed. • Complies. Some south facing balconies are proposed as a result of sites orientation. • Complies.

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	• Design balustrades to allow views and casual surveillance of the street while providing for safety and visual privacy. Design considerations may include:
	  ○ Detailing balustrades using a proportion of solid to transparent materials to address site lines from the street, public domain or adjacent development. Full glass balustrades do not provide privacy for the balcony or the dwelling's interior, especially at night.
	  ○ Detailing balustrades and providing screening from the public, for example, for a person seated looking at a view, clothes drying areas, bicycle storage or air conditioning units.
	• Operable screens increase the usefulness of balconies by providing weather protection, daylight control and privacy screening.
		• Refer to comments above.
		• Refer to comments above.

	Daylight Access • Plan the site so that new residential flat development is oriented to optimise northern aspect. • Ensure direct daylight access to communal open space between March and September and provide appropriate shading in summer.	• Refer to comments above.

	• Optimise the number of dwellings receiving daylight access to habitable rooms and principal windows:
	• Ensure daylight access to habitable rooms and private open space, particularly in winter - use skylights, clerestory windows and fanlights to supplement daylight access.
	• Promote two-storey and mezzanine, ground floor dwellings or locations where daylight is limited to facilitate daylight access to living rooms and private open spaces.
	• Ensure single aspect, single-storey dwellings have a northerly or easterly aspect:
	  ○ Locate living areas to the north and service areas to the south and west of the development.
	• Avoid south facing dwellings.
	• Design for shading and glare control, particularly in summer:
	  ○ Using shading devices, such as eaves, awnings, colonnades, balconies, pergolas, external louvres and planting.
	  ○ Optimising the number of north-facing living spaces.
	  ○ Providing external horizontal shading to north-facing windows
	  ○ Providing vertical shading to east or west windows.
	• Consider higher ceilings and higher window heads to allow deeper sunlight penetration.
	• On west facing windows, vertical louvre panels or sliding screens protect from glare and low afternoon sun.
	• On north facing windows, projecting horizontal louvres admit winter sun while shading summer sun.
	• Using high performance glass but minimising external glare off windows.
		• Complies. Refer to Appendix C.
		• The residential units have been assessed under BASIX and achieve the thermal targets.

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	• Avoid reflective films.	• This may be conditioned.
	• Use a glass reflectance below 20%.	• This may be conditioned.
	• Consider reduced tint glass.	• Refer to BASIX certificate.
	• Limit the use of lightwells as a source of daylight by prohibiting their use as the primary source of daylight in habitable rooms. Where they are used: • Relate lightwell dimensions to building separation, for example, if nonhabitable rooms face into a light well less than 12m high, the lightwell should measure 6 x 6 m. • Conceal building services and provide appropriate detail and materials to visible walls. • Ensure light wells are fully open to the sky. • A combination of louvres provides shading for different times of the day.	• None proposed.
	Internal design • All staircases should be internal. • Minimise the length of common walls between dwellings.	• Complies. • Where possible, where common walls are proposed, they have been designed adjacent to like uses to minimise noise disturbance.
	• Basement car parking shall be located beneath the building footprint. • Where possible natural ventilation shall be provided to basement car parking. • Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings.	• N/A. • N/A. • Windows and balconies have been primarily designed to address the street frontage or rear setback. Where windows are proposed to the side

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		boundaries, they have been offset.
	• Minimise the location of noise sensitive rooms such as bedrooms adjoining noisier rooms such as bathrooms or kitchens or common corridors and stairwells.	• Where possible, common walls have been designed to adjoin like uses.
	• Where a site has frontage to a Classified Road, locate bedrooms away from the front of the site.	• N/A.
	• Where common walls are provided they must be carried to the underside of the roof and be constructed in accordance with *Part F5 of the Building Code of Australia*.	• Capable of being complied with.
	• Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).	• The balconies of upper level units will overlook the entry points to the building and north-western communal open space.
	Ground Floor Dwellings	
	• Design front gardens or terraces, which contribute to the spatial and visual structure of the street while maintaining adequate privacy for dwelling occupants. This can be achieved by animating the street edge, for example, by promoting individual entries for ground floor dwellings.	• The front setback will be landscaped. Private entrances are proposed to ground floor dwellings.
	• Create more pedestrian activity along the street and articulate the street edge by: ○ Balancing privacy requirements and pedestrian accessibility. ○ Providing appropriate fencing, lighting and/ or landscaping to meet privacy and safety requirements of occupants while contributing to a pleasant streetscape. ○ Utilising a change in level from the street to the private garden or terrace to minimise site lines from the streets into the dwelling for some dwellings. ○ Increasing street surveillance with doors and windows facing onto the street.	• The proposal will include appropriate fencing, lighting and landscaping to address the privacy and safety requirements of occupants. Street surveillance has been maximised with

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	• Planting along the terrace edge contributes to a quality streetscape.	doors and windows facing onto the street. • Landscape Plan to confirm.
	• Ground floor dwellings are special because they offer the potential for direct access from the street and on-grade private landscape areas. They also provide opportunities for the dwelling building and its landscape to respond to the streetscape and the public domain at the pedestrian scale. Ground floor dwellings also support housing choice by providing accessibility to the elderly and/or disabled and support families with small children.	• Six ground floor units are proposed.
	• Optimise the number of ground floor dwellings with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site.	• Ground floor dwelling access points have been maximised.
	• Provide ground floor dwellings with access to private open space, preferably as a courtyard.	• Complies.
	Security • Entrances to buildings should be orientated towards the front of the site and facing the street.	• Pedestrian paths lead from the street frontage to individual ground level units and to the centre of the building where the residential lobby is sited.
	• The main entrance to dwellings or other premises should not be from rear lanes and should be designed with clear directions and signage.	• N/A.
	• Blank walls in general that address street frontages or public open space are discouraged. Where they are unavoidable building elements or landscaping must be used to break up large expanses of walls. In some cases an anti-graffiti coating will need to applied to the wall to a height of 2 metres.	• None proposed.
	• Minimise the number of entry points to buildings.	• Two access points are proposed to the central lobby. An intercom permits visitor access.

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	• Reinforce the development boundary to strengthen the distinction between public and private space by ○ Employing a level change at the site and/or building threshold (subject to accessibility requirements) ○ Signage. ○ Entry awnings. ○ Fences, walls and gates. ○ Change of material in paving between the street and the development.	• Appropriate fencing/gates will be provided.
	• Optimise the visibility, functionality and safety of building entrances by: ○ Orienting entrances towards the public street. ○ Providing clear lines of sight between entrances, foyers and the street. ○ Providing direct entry to ground level dwellings from the street rather than through a common foyer. ○ Direct and well-lit access between car parks and dwellings, between car parks and lift lobbies and to all unit entrances.	• The development includes clear lines of sight between entrances and the street. As stated direct entry is proposed to ground level dwellings rather than through foyers. The car park lift lobbies and common areas will be well lit and designed as clear, direct paths.
	• Improve the opportunities for casual surveillance by: ○ Orienting living areas with views over public or communal open spaces, where possible. ○ Using bay windows and balconies, which protrude beyond the main façade and enable a wider angle of vision to the street. ○ Using corner windows, which provide oblique views of the street. ○ Providing casual views of common internal areas, such as lobbies and foyers, hallways, recreation areas and car parks.	• The living areas of upper level units are provided with views over the communal open space. The proposed south facing balconies will enable sightlines to Kurrajong Road.
	• Minimise opportunities for concealment by: ○ Avoiding blind or dark alcoves near lifts and stairwells, at the entrance and within indoor car parks, along corridors and walkways. ○ Providing well-lit routes throughout the development.	• The development does not include any blind or dark alcoves near lifts and

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	○ Providing appropriate levels of illumination for all common areas. ○ Providing graded illumination to car parks and illuminating entrances higher than the minimum acceptable standard.	stairwells, at the entrance and within indoor car parks, along corridors and walkways. Well-lit routes will be provided throughout the development.
	• Control access to the development by: ○ Making dwellings inaccessible from the balconies, roofs and windows of neighbouring buildings. ○ Separating the residential component of a development's car parking from any other building use and controlling car park access from public and common areas. ○ Providing direct access from car parks to dwelling lobbies for residents.	• Intercom access limits visitors to the site.
	Natural Ventilation • Utilise the building layout and section to increase the potential for natural ventilation. Design solutions may include: ○ Facilitating cross ventilation by designing narrow building depths and providing dual aspect dwellings, for example, cross through dwellings and corner dwellings. ○ Facilitating convective currents by designing units, which draw cool air in at lower levels and allow warm air to escape at higher levels, for example, maisonette dwellings and two-storey dwellings. • Select doors and windows (that open) to maximise natural ventilation opportunities established by the dwelling layout. • Provide narrow building depths to support cross ventilation. • Avoid single-aspect dwellings with a southerly aspect. • Design the internal dwelling layout to promote natural ventilation by: ○ Minimising interruptions in air flow through a dwelling. ○ Grouping rooms with similar usage together, for example, keeping living spaces together and sleeping spaces together. This allows the dwelling to be compartmentalised for efficient summer cooling or winter heating. ○ Select doors and operable windows to maximise natural ventilation opportunities established by the dwelling layout.	• Refer to Appendix C of this report.

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	Building Layout • The layout of dwellings within a residential flat building should minimise the extent of common walls. **Storage Areas** • A secure storage space is to be provided for each dwelling with a minimum volume 8 m3 (minimum dimension 1m2). This must be set aside exclusively for storage as part of the basement or garage. • Storage areas must be adequately lit and secure. Particular attention must be given to security of basement and garage storage areas.	• Common walls have been minimised as much as possible. • Refer to Appendix C of this report.
Landscaping And Fencing	• The setback areas are to be utilised for canopy tree planting. The landscape design for all development must include canopy trees that will achieve a minimum 8 m height at maturity within front and rear setback areas. • Landscape planting should be principally comprised of native species to maintain the character of Liverpool and provide an integrated streetscape appearance. Species selected in environmentally sensitive areas should be indigenous to the locality. However, Council will consider the use of deciduous trees. • The landscaping shall contain an appropriate mix of canopy trees, shrubs and groundcovers. Avoid medium height shrubs (600 – 1800mm) especially along paths and close to windows and doors. • Landscaping in the vicinity of a driveway entrance should not obstruct visibility for the safe ingress and egress of vehicles and pedestrians. • Tree and shrub planting alongside and rear boundaries should assist in providing effective screening to adjoining properties. • Landscaping on any podium level or planter box shall be appropriately designed, and irrigated. Landscaping on podium levels and planter boxes should be accessible from habitable areas of dwellings or elsewhere as appropriate for gardener access in other forms of development. • The development must be designed around significant vegetation on the site. • It is important to retain significant vegetation to maintain an existing streetscape and enhance the visual appearance of new dwellings. • Trees adjacent to private open space areas and living rooms should provide summer shade and allow winter sun entry. • Where landscaping is used to control overlooking, species selected are to be a kind able to achieve privacy within 3 years. • All species of trees and shrubs should be drought resistant.	• Complies. Refer to Landscape Plan.

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	• Advanced tree species are to be used for key elements with the landscape design concept.
	• Any tree with a mature height over 8m should be planted a minimum distance of 3m from the building or utility services.
	• Contribute to streetscape character and the amenity of the public domain by:
	  ○ Relating landscape design to the desired proportions and character of the streetscape.
	  ○ Using planting and landscape elements appropriate to the scale of the development.
	  ○ Mediating between and visually softening the bulk of large development for the person on the street.
	• Improve the energy efficiency and solar efficiency of dwellings and the microclimate of private open spaces.
	• Planting design solutions include:
	  ○ Trees for shading low-angle sun on the eastern and western sides of a dwelling.
	  ○ Trees that do not cast a shadow over solar collectors at any time of the year.
	  ○ Deciduous trees for shading of windows and open space areas in summer.
	• Design landscape which contributes to the site's particular and positive characteristics, for example by:
	  ○ Enhancing habitat and ecology.
	  ○ Retaining and incorporating trees, shrubs and ground covers endemic to the area, where appropriate.
	  ○ Retaining and incorporating changes of level, visual markers, views and any significant site elements.
	
	Planting on Structures
	• Design for optimum conditions for plant growth by:
	• Providing soil depth, soil volume and soil area appropriate to the size of the plants to be established.
	• Providing appropriate soil conditions and irrigation methods.
	• Providing appropriate drainage.
	• Design planters to support the appropriate soil depth and plant selection by:
	• Ensuring planter proportions accommodate the largest volume of soil possible. Minimum soil depths will vary depending on the size of the plant.
	• However, soil depths greater than 1.5 m are unlikely to have any benefits for tree growth. Providing square or rectangular planting areas rather than long narrow linear areas.
	• Refer to DCP for minimum standards for plant sizes.
	
	Fencing – Primary frontage
	• The maximum height of a front fence is 1.2m.
	• The front fence may be built to a maximum height of 1.5m if the fence is setback 1m from the front boundary with suitable landscaping in front of the proposed fence.	

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	• Fences should not prevent surveillance by the dwelling's occupants of the street or communal areas.
	• The front fence must be 30% transparent.
	• Front fences shall be constructed in masonry, timber, metal pickets and/or vegetation and must be compatible with the proposed design of the dwelling.
	• The front fence may be built to a maximum of 1.8m only if
	  ○ The primary frontage is situated on a Classified Road.
	  ○ The fence is articulated by 1m for 50% of its length and have landscaping in front of the articulated portion.
	  ○ The fence does not impede safe sight lines from the street and from vehicles entering and exiting the site.
	
	Fencing – Secondary frontage
	• Fences and walls must be a maximum of 1.8m in height, and constructed of masonry, timber and/or landscaped.
	• For side walls or fences along the secondary frontage, a maximum height of 1.2m is required for the first 9m measured from the front boundary, the remaining fence / wall may then be raised to a maximum of 1.8m. The secondary setback is the longest length boundary.
	
	Boundary Fences
	• The maximum height of side boundary fencing within the setback to the street is1.2m.
	• Boundary fences shall be lapped and capped timber or metal sheeting.	

Car Parking And Access	**Car Parking**
	• Visitor car parking shall be clearly identified and may not be stacked car parking.
	• Visitor car parking shall be located between any roller shutter door and the front boundary.
	• Pedestrian and driveways shall be separated.
	• Driveways shall be designed to accommodate removalist vehicles.
	• Where possible vehicular entrances to the basement car parking shall be from the side of the building. As an alternative a curved driveway to an entrance at the front of the building may be considered if the entrance is not readily visible from the street.
	• Give preference to underground parking, whenever possible by:
	  ○ Retaining and optimising the consolidated areas of deep soil zones.
	  ○ Facilitating natural ventilation to basement and sub-basement car parking areas, where possible.
		• Refer to SEPP (ARH) 2009 and the submitted Traffic Report.
		
		• There is no basement parking proposed. The proposal includes at grade car parking that is sited towards the side and rear of the site.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	○ Integrating ventilation grills or screening devices of car park openings into the facade design and landscape design. ○ Providing safe and secure access for building users, including direct access to residential dwellings, where possible. ○ Providing a logical and efficient structural grid. There may be a larger floor area for basement car parking than for upper floors above ground. Upper floors, particularly in slender residential buildings, do not have to replicate basement car parking widths. • Where above ground enclosed parking cannot be avoided, ensure the design of the development mitigates any negative impact on streetscape and street amenity by: ○ Avoid exposed parking on the street frontage. ○ Hiding car parking behind the building facade. Where wall openings (windows, fenestrations) occur, ensure they are integrated into the overall facade scale, proportions and detail. **Pedestrian Access** • Utilise the site and it's planning to optimise accessibility to the development. • Provide high quality accessible routes to public and semi-public areas of the building and the site, including major entries, lobbies, communal open space, site facilities, parking areas, public streets and internal roads. • Promote equity by: ○ Ensuring the main building entrance is accessible for all from the street and from car parking areas. ○ Integrating ramps into the overall building and landscape design. ○ Design ground floor dwellings to be accessible from the street, where applicable, and to their associated private open space. • Maximise the number of accessible and adaptable dwellings in a building by: ○ Providing more than one accessible entrance where a development contains clusters of buildings. ○ Separating and clearly distinguish between pedestrian accessways and vehicle accessways. ○ Locating vehicle entries away from main pedestrian entries and on secondary.	 • Complies. • Complies. • Complies. Refer to Access Report.
Amenity And Environmental Impact	**Overshadowing** • Adjoining properties must receive a minimum of three hours of sunlight between 9am and 5pm on 21 June to at least: ○ One living, rumpus room or the like; and ○ 50% of the private open space **Privacy**	• Refer to SEPP 65/ADG.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	• Building siting, window location, balconies and fencing should take account of the importance of the privacy of onsite and adjoining buildings and outdoor spaces. • Windows to habitable rooms should be located so they do not overlook such windows in adjoining properties, other dwellings within the development or areas of private open space. • Landscaping should be used where possible to increase visual privacy between dwellings and adjoining properties. • Where possible the ground floor dwellings should be located above ground level to ensure privacy for occupants of the dwellings. • Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings by: o Balconies to screen other balconies and any ground level private open space. o Separating communal open space, common areas and access routes through the development from the windows of rooms, particularly habitable rooms. o Changing the level between ground floor dwellings with their associated private open space, and the public domain or communal open space. • Use detailed site and building design elements to increase privacy without compromising access to light and air by: o Offsetting windows of dwellings in new development and adjacent development windows. o Recessed balconies and/or vertical fins between adjacent balconies. o Solid or semi-solid balustrades to balconies - louvres or screen panels to windows and/or balconies. o Fencing. o Vegetation as a screen between spaces. o Incorporating planter boxes into walls or balustrades to increase the visual separation between areas. o Utilising pergolas or shading devises to limit overlooking of lower dwellings or private open space.	• Refer to SEPP 65/ADG.
	Acoustic Impact • Noise attenuation measures should be incorporated into building design to ensure acoustic privacy between on-site and adjoining buildings. • Buildings having frontage to a Classified Road or a railway and impacted upon by rail or traffic related noises must incorporate the appropriate noise and vibration mitigation measures into the design in terms of the site layout, building materials and design, orientation of the buildings and location of sleeping and recreation areas.	• Complies. Refer to Acoustic Report

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY

	• The proposed buildings must comply with the Environment Protection Authority criteria and the current relevant Australian Standards for noise and vibration and quality assurance.
	• Arrange dwellings within a development to minimise noise transition between dwellings by:
	  ○ Locating busy, noisy areas next to each other and quieter areas next to other quiet areas, for example, living rooms with living rooms, bedrooms with bedrooms
	  ○ Using storage or circulation zones within an dwelling to buffer noise from adjacent dwellings, mechanical services or corridors and lobby areas
	  ○ Minimising the amount of common walls with other dwellings.
	  ○ Design the internal dwelling layout to separate noisier spaces from quieter spaces by:
	  ▪ Grouping uses within a dwelling - bedrooms with bedrooms and service areas like kitchen, bathroom, and laundry together.	

Site Services	**Letterboxes**
	• Letterboxes shall to be provided for each dwelling on site, easily accessible from the street, able to be securely locked and provided in accordance with Australia Post's requirements.
	• Freestanding letterbox structures should be designed and constructed of materials that relate to the main building.
	• Residential numbering should be attached to the letterbox so that it is clearly visible from the street frontage. Numbers should be 75mm in height, reflective and in contrast to the backing material.
	
	Waste Management
	• Waste disposal facilities shall be provided for development. These shall be located adjacent to the driveway entrance to the site.
	
	• Any structure involving waste disposal facilities shall be located as follows:
	  ○ Setback 1 m from the front boundary to the street.
	  ○ Landscaped between the structure and the front boundary and adjoining areas to minimise the impact on the streetscape.
	  ○ Not be located adjacent to an adjoining residential property.
	  ○ Details of the design of waste disposal facilities are shown in Part 1 of the DCP.
	
	Frontage works and damage to Council infrastructure
		• Complies.
		
		• This may be conditioned.
		
		• Bin room is located, adjacent to the carpark.
		
		• Complies.
		• Complies. Refer to Landscape Plan.
		• Complies

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	• Where a footpath, road shoulder or new or enlarged access driveway is required to be provided this shall be provided at no cost to Council. • Council must be notified of any works that may threaten Council assets. Council must give approval for any works involving Council infrastructure. • Where there are no existing street trees in front of the site and contributions have not been collected for street tree planting it may be a condition of consent that street trees be provided in the footpath area immediately in front of the site. **Electricity Sub Station** • In some cases it may be necessary to provide an electricity substation at the front of the development adjacent to the street frontage. This will involve dedication of the area as a public road to allow access by the electricity provider. The front boundary treatment used elsewhere on the street frontage.	• This may be conditioned. • This may be conditioned. • This may be conditioned. • A substation is proposed toward the north-eastern corner of the site.

Appendix F Clause 4.6 Variation to Clause 4.3 of the Liverpool Local Environmental Plan 2008 – Height of Buildings

CLAUSE 4.6 VARIATION TO CLAUSE 4.3 (HEIGHT OF BUILDINGS)
OF THE LIVERPOOL LOCAL ENVIRONMENTAL PLAN 2008

1. INTRODUCTION

This submission seeks a variation to Clause 4.3 of the Liverpool Local Environmental Plan 2008 (LLEP08), which relates to building height.

This submission has been prepared with regards to a development application over Nos. 30-38 Ironbark Avenue, Casula for the demolition of all existing structures and the development of a five (5) storey residential flat building comprising of 63 units (15 x 1-bedroom units and 48 x 2-bedroom units) to be used wholly for the purposes of affordable rental housing.

As detailed in this written request for a variation to building height being a development standard under LLEP08, the proposed development meets the requirements prescribed under Clause 4.6 of LLEP08.

This submission is made under clause 4.6 of the LLEP08 – Exceptions to development standards. Clause 4.6 states the following:

> ***"4.6 Exceptions to development standards***
>
> *(1) The objectives of this clause are as follows:*
> *(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
> *(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*
>
> *(2) Development consent may, subject to this clause, be granted for a development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.*
>
> *(3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:*
> *(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
> *(b) that there are sufficient environmental planning grounds to justify contravening the development standard.*
>
> *(4) Development consent must not be granted for development that contravenes a development standard unless:*
> *(a) the consent authority is satisfied that:*
> *(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
> *(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*

(b) the concurrence of the Director-General has been obtained.

(5) In deciding whether to grant concurrence, the Director-General must consider:
(a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and
(b) the public benefit of maintaining the development standard, and
(c) any other matters required to be taken into consideration by the Director-General before granting concurrence.

(6) Development consent must not be granted under this clause for a subdivision of land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if:
(a) the subdivision will result in 2 or more lots of less than the minimum area specified for such lots by a development standard, or
(b) the subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.
***Note.** When this Plan was made it did not include any of these Zones.*

(7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).

(8) This clause does not allow development consent to be granted for development that would contravene any of the following:
(a) a development standard for complying development,
(b) a development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 applies or for the land on which such a building is situated,
(c) clause 5.4
(ca) clause 6.4, 6.5, 6.6, 7.22, 7.24, 7.25, 7.26, 7.26A, 7.27, 7.28, 7.29 or 7.30."

The use of Clause 4.6 to enable an exception to this development control is appropriate in this instance and the consent authority may be satisfied that all requirements of Clause 4.6 have been satisfied in terms of the merits of the proposed development and the content in this Clause 4.6 variation request report.

Clause 4.6 Exceptions to development standards establishes the framework for varying development standards applying under a local environmental plan. Subclause 4.6(3)(a) and 4.6(3)(b) requires that a consent authority must not grant consent to a development that contravenes a development standard unless a written request has been received from the applicant that seeks to justify the contravention of the standard by demonstrating that:

4.6(3)(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and

4.6(3)(b) that there is sufficient environmental planning grounds to justify contravening the development standard.

In addition, 4.6(4)(a)(i) and (ii) requires that development consent must not be granted to a development that contravenes a development standard unless the:

(a) the consent authority is satisfied that:

(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and

(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and

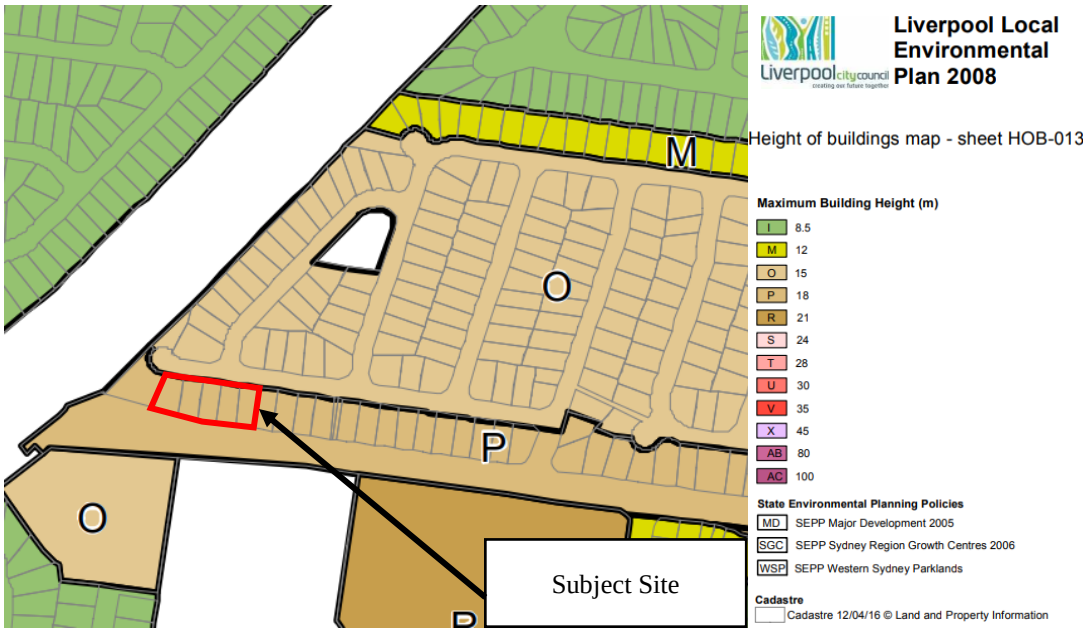
The Environmental Planning Instrument to which these variations relate to is the LLEP 08.

The development standard to which this variation relates to is Clause 4.3 – Height of Buildings, which reads as follows:

> *"(1) The objectives of this clause are as follows:*
>
> *(a) to establish the maximum height limit in which buildings can be designed and floor space can be achieved,*
>
> *(b) to permit building heights that encourage high quality urban form,*
>
> *(c) to ensure buildings and public areas continue to receive satisfactory exposure to the sky and sunlight,*
>
> *(d) to nominate heights that will provide an appropriate transition in built form and land use intensity.*
>
> *(2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.*
>
> ***Note.** Clauses 5.6, 7.2 and 7.5 provide for circumstances under which a building in the Liverpool city centre may exceed the maximum height shown for the land on the Height of Buildings Map".*

As demonstrated in Figure 1 below, the subject site is limited to a maximum building height of 18m.

Figure 1 – Height of Buildings Map



Source: NSW Legislation, LLEP 08 map 013.

The proposed residential flat building will exceed the standard with a proposed building height of 19m as measured from the existing ground level to the top of the lift overrun. The variation is equivalent to 1m or 5.5%. The breach of height does not relate to any habitable floor space with this being contained within the prescribed height control specified across the site. To the top of the building parapet the maximum height measures 17m and is therefore compliant.

A written justification is therefore required for the proposed variation to the maximum building height development standard, in accordance with Clause 4.6 of the LLEP 08.

2. EXTENT OF NON-COMPLIANCE

As noted above Clause 4.3 of the LLEP 08 states that the maximum building height for the site is 18m.

The current proposal seeks a maximum building height of 19m to the lift overrun. The proposal therefore exceeds the standard by 1m or 5.5%. The maximum height sought to the building parapet equals 17m which complies with the standard, ensuring no habitable floor area contributes to the breach in height.

It is our submission that the breach to the building height control will not impact on the amenity of the development or adjoining properties, nor will the variation compromise the architecture of the building or the bulk and scale of the development.

A degree of flexibility is considered reasonable in this instance.

3. IS COMPLIANCE WITH THE DEVELOPMENT STANDARD UNREASONABLE OR UNNECESSARY IN THE CIRCUMSTANCES OF THE CASE?

The proposed variation from the development standard is assessed against the required tests in Clause 4.6. In addition, in addressing the requirements of Clause 4.6(3), the accepted five possible approaches for determining whether compliances are unnecessary or unreasonable established by the NSW Land and Environment Court in *Wehbe vs Pittwater Council (2007) LEC 827 are considered.*

In the matter of Four2Five, the Commissioner stated within the judgement the following, in reference to a variation:

"…the case law developed in relation to the application of SEPP 1 may be of assistance in applying Clause 4.6. While Wehbe concerned an objection under SEPP 1, in my view the analysis is equally applicable to a variation under Clause 4.6 where Clause 4.6 (3)(a) uses the same language as Clause 6 of SEPP 1."

In the decision of *Wehbe vs Pittwater Council (2007) LEC 827,* Preston CJ summarised the five (5) different ways in which an objection under SEPP 1 has been well founded and that approval of the objection may be consistent with the aims of the policy. The five possible ways are as set out below:

First	*The most commonly invoked way is to establish that compliance with the development standards is unreasonable or unnecessary because the objectives of the development standard are achieved notwithstanding non-compliance with the standard.*

	The rationale is that development standards are not ends in themselves but means of achieving ends. The ends are environmental or planning objectives. If the proposed development proffers an alternative means of achieving the objective, strict compliance with the standard would be unnecessary and unreasonable. (applicable)
Second	*A second way is to establish that the underlying objective or purpose is not relevant to the development with the consequence that compliance is unnecessary. (not applicable)*
Third	*A third way is to establish that the underlying objective or purpose would be defeated or thwarted if compliance was required with the consequence that compliance is unreasonable. (not applicable)*
Fourth	*A fourth way is to establish that the development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable. (not applicable)*
Fifth	*A fifth way is to establish that "the zoning of particular land" was "unreasonable or inappropriate" so that "a development standard appropriate for that zoning was also unreasonable or unnecessary as it applied to that land" and that "compliance with the standard in that case would also be unreasonable or unnecessary. (not applicable)*

In respect of the building height standard, the first method is invoked.

The objectives supporting the maximum building height control identified in Clause 4.3 are discussed below. Consistency with the objectives and the absence of any environmental impacts, would demonstrate that strict compliance with the standards would be both unreasonable and unnecessary in this instance.

The discussion provided below demonstrates how the proposal is consistent with the objectives of Clause 4.3.

> *"(1) The objectives of this clause are as follows:*
> *(a) to establish the maximum height limit in which buildings can be designed and floor space can be achieved,*
> *(b) to permit building heights that encourage high quality urban form,*
> *(c) to ensure buildings and public areas continue to receive satisfactory exposure to the sky and sunlight,*
> *(d) to nominate heights that will provide an appropriate transition in built form and land use intensity".*

With respect to objective (a), the subject site has a maximum building height limit of 18 metres and floor space ratio control of 1.2:1 under LLEP08. As the current proposal is made under State Environmental Planning Policy (Affordable Rental Housing) 2009, a bonus 0.5:1 is afforded, allowing a maximum floor space ratio of 1.7:1 to be achieved on the site.

The proposal is notably compliant with the maximum floor space ratio control, however seeks a variation to the maximum height control as described in this letter. In a decision of the Land Environment Court, *Abdul-Rahman v Ashfield Council [2015] NSWLEC 1122,* Commissioner O'Neil stated,

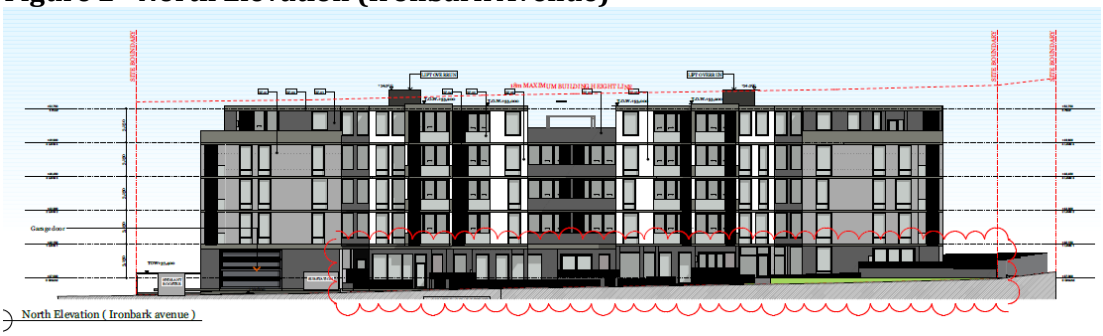
"I accept the argument put by the applicant that the consequence of the SEPP ARH incentives, which seek to facilitate the effective delivery of new affordable rental housing by way of expanded zoning permissibility, floor space ratio bonuses and non-discretionary development

standards, is to expand the permissible building envelope for a site in some way, although pursuant to cl 16A of SEPP ARH, any increase of the building envelope has to be compatible with the character of the local area. In this matter, the proposal complies with the FSR development standard in LEP 2013 and does not seek the benefit of the FSR incentive of SEPP ARH at cl 13, however the principle of an expanded building envelope in recognition of the contribution of affordable rental housing made by the proposal is still relevant".

In keeping with the above, we submit that the proposed variation is attributable to the increased density available on the site. In view of the context of the site, it was not considered feasible to further encroach upon the setbacks to the adjoining developments and consequently the proposed height has exceeded the maximum standard.

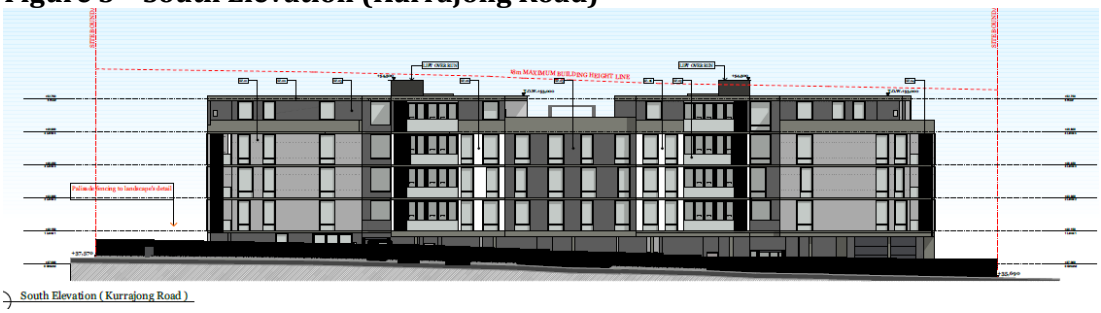
We note, that the greatest variation to the height control is achieved only for the lift overrun with no variation attributable to habitable floor areas. This is demonstrated in the images below.

Figure 2 - North Elevation (Ironbark Avenue)



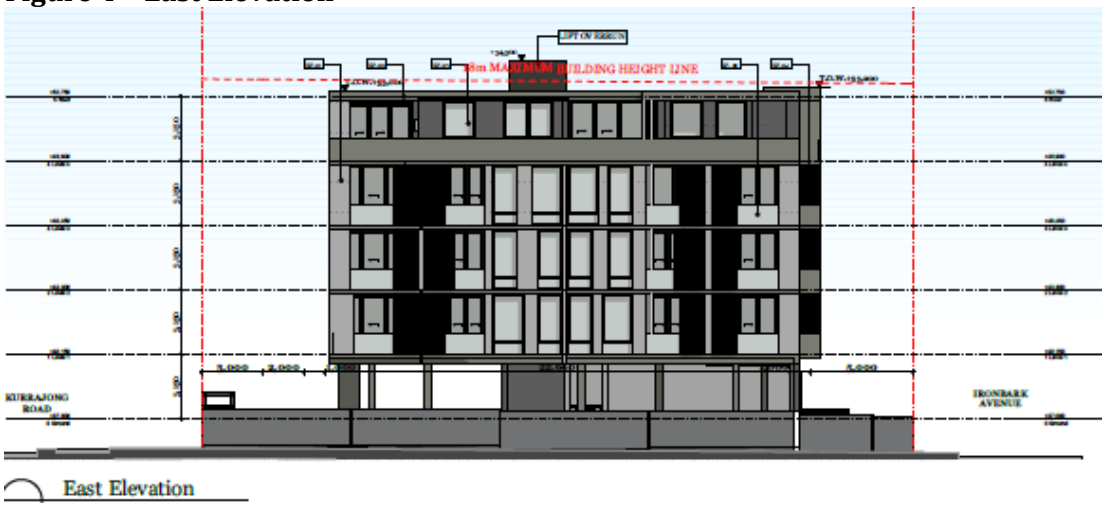
Source DKO Architecture

Figure 3 – South Elevation (Kurrajong Road)



Source DKO Architecture

Figure 4 – East Elevation



Source: DKO Architecture

Figure 5 - West Elevation

Source: DKO Architecture

The tallest component of the building contributing to the breach in height is therefore limited to a relatively small portion of the built form comprising part of the lift overrun. The lift overrun has been centred over the site to reduce its visual prominence. No variation is sought in terms of habitable floor area, with this being contained within the prescribed maximum height control.

The proposed development has been carefully designed to project a highly articulated appearance to each of the facades. The depth of the units has been limited allowing for breaks in each elevation and steps in the overall design. The use of balconies to the front and rear of the building provides for visual relief from solid external walls and aids to break up the building mass. The proposal therefore satisfies objective (b).

The proposed development has also been designed to maximise solar access with 86% of the proposed units across the entire development achieving a minimum of 2 hours solar access. A total of 63% of units across the development will be naturally cross ventilated in keeping with objective (c).

In addition, the proposed development has been well articulated to the street frontage and proposes varying setbacks to both side and rear boundaries to ensure that the actual and perceived bulk of the building is minimised not only from the street but also as viewed from the adjoining properties.

4. ARE THERE SUFFICIENT ENVIRONMENTAL PLANNING GROUNDS?

The assessment above demonstrates that the resultant environmental impacts of the proposal will be satisfactory.

The proposal addresses the site constraints, streetscape and relevant objectives of both the standards and the zone. The proposal will not result in any unreasonable amenity or environmental impacts. As demonstrated within the accompanying Statement of Environmental Effects the development has demonstrated compliance in terms of shadowing, privacy and visual amenity. The development positively responds to the desired future character of the area.

We respectfully submit that the proposal will result in a better planning outcome as SEPP (Affordable Rental Housing) 2009, only requires that up to 50% of the dwellings be offered as affordable housing for a period of 10 years, whereas all of the proposed 63 units will be nominated as affordable housing to be managed by our client, St George Community Housing.

The proposal therefore provides a social benefit to the community providing for new, affordable accommodation in an area well serviced by public transport services and local infrastructure, consequently, addressing housing affordability issues within the Sydney region.

Regular bus services are available along Kurrajong Road, which appropriately service the site in accordance with the accessible area criteria. The site is well located to local amenities and infrastructure with the site being well serviced by large expanses of public green open space with Daruk Park located approximately 31m south of the site and Jardine Park also situated approximately 585m east of the site, each of which offer ample active and passive recreational opportunities within the community.

Lurnea High School, Casula High School and Prestons Public School are all proximately located to the site being within 600m to the north-west, west and south-west of the site, respectively.

Casula Mall is located approximately 130m south-east of the site providing for numerous and a diverse array of services, amenities and commercial outlets. Casula Library and Casula Community Centre are also situated approximately 220m south of the site, diversifying the available local amenities.

The development is also notably compliant with the maximum 1.7:1 FSR prescribed by SEPP (Affordable Rental Housing) 2009.

In this case, strict compliance with the height of buildings development standard of the LLEP 08 is unnecessary and unreasonable.

5. IS THE VARIATION IN THE PUBLIC INTEREST?

Clause 4.6 states that development consent must not be granted for development that contravenes a development standard unless the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is to be carried out.

It is considered that this submission provides sufficient environmental planning grounds to justify contravening the development standard under Part 4.

The development as proposed will be in the public interest as it is consistent with the objectives of Clause 4.3.

The building contextually has regard to its surrounding properties and provides sufficient open space and landscaping for the amenity of future residents.

Importantly, all 63 of the proposed units will be nominated as affordable housing to be managed by our client St George Community Housing. This will assist in addressing the growing issue of housing affordability in the Sydney region.

Furthermore, it is important to also consider the objectives of the R4 High Density Residential zone in relation to the development, which are as follows:

> ***Zone R4 High Density Residential***
>
> ***Objectives of zone***
> - *To provide for the housing needs of the community within a high density residential environment.*
> - *To provide a variety of housing types within a high density residential environment.*
> - *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
> - *To provide for a high concentration of housing with good access to transport, services and facilities.*
> - *To minimise the fragmentation of land that would prevent the achievement of high density residential development.*

In response to the above the following is provided:

The proposed residential flat building will replace the existing dwellings on the site with 63 proposed units to provide for the housing needs of the community within a high-density environment.

The proposal comprises of a mix of 1 and 2-bedroom units, including adaptable designs ensuring a variety of housing types are available.

No other land uses are proposed.

The site is readily accessible by public transport with bus stops located within proximity from the development. The site is also located in close proximity to Casula Mall to the south-east of the site.

The proposal will not result in the fragmentation of land.

It is considered that this submission provides sufficient environmental planning grounds to justify contravening the development standards, noting the development will be in the public interest.

6. PUBLIC BENEFIT OF MAINTAINING THE STANDARD

It is considered that there is no benefit to the public or the community in maintaining the development standards. The proposed development will allow for the creation of a high quality residential development which as stated above meets the desired objectives of the standard.

Housing affordability in Sydney is becoming increasingly difficult. Our client is a not for profit organisation seeking to address a prevalent issue in Sydney's housing market. Our client is committed to providing a development that is 100% affordable housing far surpassing the requirements of State legislation. The additional height sought on the site will enable additional units to be provided to the benefit of the local government area. The area can support an increase in density and this is encouraged by Council.

It is not considered that the variation sought raises any matter of significance for State or regional environmental planning.

The departure from the height of buildings control within the LLEP 08 allows for the orderly and economic use of the site in a manner which achieves the outcomes and objectives of the relevant planning controls.

7. IS THE VARIATION WELL FOUNDED?

It is considered that this has been adequately addressed in Parts 4 and 5 of this submission. In summary, this Clause 4.6 Variation is well founded as required by Clause 4.6 of the LLEP 08 in that:

- Compliance with the development standards would be unreasonable and unnecessary in the circumstances of the development;
- There are sufficient environmental planning grounds to justify the departure from the standards;
- The development meets the objectives of the standard to be varied (height of buildings) and objectives of the R4 High Density Residential zoning of the land;
- The proposed development is in the public interest and there is no public benefit in maintaining the standard;
- The breach does not raise any matter of State of Regional Significance; and
- The development submitted aligns with the revitalisation of the formerly low-density precinct.

Based on the above, the variation is considered to be well founded.

8. GENERAL

Clause 4.6 also states that:

> *"(6) Development consent must not be granted under this clause for a subdivision of land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if:*
> *(a) the subdivision will result in 2 or more lots of less than the minimum area specified for such lots by a development standard, or*
> *(b) the subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.*
> ***Note.*** *When this Plan was made it did not include any of these zones.*
>
> *(7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).*
>
> *(8) This clause does not allow development consent to be granted for development that would contravene any of the following:*
> *(a) a development standard for complying development,*
> *(b) a development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 applies or for the land on which such a building is situated,*
> *(c) clause 5.4,*
> *(ca) clause 6.4, 6.5, 6.6, 7.22, 7.24, 7.25, 7.26, 7.26A, 7.27, 7.28, 7.29 or 7.30."*

This variation does not relate to the subdivision of land. The variation sought is thus not contrary to subclause (6).

Should the exception to the development standard sought under this submission be supported by Council, the Council must retain a record of the assessment of this submission.

The development proposed is not complying development.

A BASIX certificate was provided for the development.

Clause 5.4 of the LLEP 08 does not apply to the proposal.

Clauses *6.4, 6.5, 6.6, 7.22, 7.24, 7.25, 7.26, 7.26A, 7.27, 7.28, 7.29 or 7.30.* of the LLEP 08 do not apply to the site.

9. CONCLUSION

The proposal does not strictly comply with the maximum building height control as prescribed by Clause 4.3 of the LLEP 08. Having evaluated the likely affects arising from this non-compliance, we are satisfied that the objectives of Clause 4.6 of the LLEP 08 are satisfied as the breach to the controls does not create any adverse environmental impacts.

As reiterated throughout this report, the proposal seeks to provide for a development comprising of entirely affordable housing. The development will address a rising social issue in Sydney's housing market whereby rising prices are making affordable accommodation increasingly difficult to come by and is therefore within the public interest.

The proposed development will be managed by our client, St George Community Housing with all units used for the purposes of affordable housing for at least a 10-year period.

Consequently, strict compliance with this development standard is unreasonable and unnecessary in this particular instance and that the use of Clause 4.6 of the LLEP 08 to vary this development controls is appropriate in this instance.

Based on the above, it is sensible to conclude that strict compliance with the maximum building height control is not necessary and that a better outcome is achieved for this development by allowing flexibility in the application and in the public interest.

Should you have any questions regarding the proposed development, please do not hesitate to contact me.

Kind regards,

Valdis Aleidzans
GAT & Associates
Plan 3219

LIVERPOOL CITY COUNCIL

Our Ref: PL-37/2018
Contact: Customer Service
Ph: 1300 36 2170
Date: 29 June 2018

GAT AND ASSOCIATES
PO BOX 96
HABERFIELD NSW 2046

Dear Sir/Madam,

Pre - Development Application Advice

Reference Number:	PL-37/2018	
Proposed Development:	Demolition of all existing structures and the development of a five storey residential flat building with at grade parking. The application is made in persuant to SEPP (Affordable Rental Housing) 2009 and by a social housing provider (St George Community Housing)	
Property Address:	30 - 38 IRONBARK AVENUE, CASULA NSW LOT 19, 20, 21, 22 & 23 DP 245413	
Date of Meeting:	20 June 2018	
Present at Meeting:	**Council Representatives:**	
	Name	**Title**
	Michael Oliveiro	Senior Development Planner
	Gorana Dubroja	Development Assessment Planner
	Applicant Representatives:	
	Name	**Company**
	Omar Sen	DKO Architecture Pty. Ltd.
	Ian Vim	DKO Architecture Pty. Ltd.
	George Bakopoulos	SGCH

	Gerard Turrisi	GAT and Associates
	Valdis Abeidzans	GAT and Associates
	Aleksandar Vasiloski	Bonocci Group
	Mathew Ryan	SGCH
	Alex Soovoroff	SPM
	Matt Balliam	SGCH

EXECUTIVE SUMMARY

Zoning:	R4 – High Density Residential
Relevant Environmental Planning Instruments & Codes	• State Environmental Planning Policy Affordable Rental Housing 2009 (ARHSEPP 2009) • State Environmental Planning Policy No. 55 – Remediation of Land • State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development • State Environmental Planning Policy (BASIX: Building Sustainability Index) 2004 • The Greater Metropolitan Regional Environmental Plan (GMREP) No. 2 – Georges River Catchment is now a deemed SEPP and must be addressed. • State Environmental Planning Policy Infrastructure 2007 • Liverpool Local Environmental Plan 2008 (LLEP 2008) • Liverpool Development Control Plan 2008 (LDCP 2008)
Relevant external referrals:	• None at this stage.

Issue / Planning Control	Comments
Accessible Area and ARH SEPP	Evidence shall be provided that the site is located within an accessible area as defined by ARHSEPP 2009. Unless it can be demonstrated that the site satisfies the accessible area criteria, the proposal cannot rely on the provisions of the ARHSEPP 2009.
SWCPP (Joint Regional Planning Panel)	If the proposed development is considered to be an affordable rental housing development with a Capital Investment Value (CIV) in excess of $5,000,000 then the prospective development application will need to be determined by the Sydney Western City Planning Panel (SWCPP).
Floor Space Ratio	The proposed development shall be fully compliant with the FSR applicable to the site. The applicable FSR will be that prescribed under the Liverpool LEP 2008 plus the additional floor space provided by the ARHSEPP 2009. The relevant FSR excerpt from the ARHSEPP 2009 is Clause 13(2), which reads as follows: *"(2) The maximum floor space ratio for the development to which this clause applies is the existing maximum floor space ratio for any form of residential accommodation permitted on the land on which the development is to occur, plus:* *(a) if the existing maximum floor space ratio is 2.5:1 or less:* *(i) 0.5:1—if the percentage of the gross floor area of the development that is used for affordable housing is 50 per cent or higher, or* *(ii) Y:1—if the percentage of the gross floor area of the development that is used for affordable housing is less than 50 per cent,* *where:* *AH is the percentage of the gross floor area of the development that is used for affordable housing.* *Y = AH ÷ 100"* Subclause (2)(a)(i) applies to the proposal. The FSR calculation methodology is to be provided as part of the SEE for Council's assessment.

Height	Consideration should be given to Clause 4.3(2) of the LLEP 2008, which states the following: *"(2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map."* Accordingly, the maximum height of any development on the subject site shall not exceed 18m. If the applicant wishes to pursue any departure from the maximum height, they will require a variation statement to be prepared in accordance with Clause 4.6 of the LLEP 2008. Variations will only be supported where an adequate environmental justification can be demonstrated and it can be shown that compliance with the development standard is unnecessary and/or unreasonable in this circumstance.
Parking	Consideration should be given to Subclause 14(2)(a)(i) of the ARHSEPP 2009, which includes the following provisions for car parking (where the site is in an accessible area): ○ 1 bedroom dwelling - 0.4 spaces ○ 2 bedroom dwelling – 0.5 spaces ○ 3 bedroom dwelling - 1 space The applicant shall ensure that an appropriate amount of parking will be provided as listed above.
Solar Access	Clause 14 of the ARHSEPP 2009 contains standards that cannot be used to refuse consent. The relevant excerpt from Clause 14(1) of the ARH SEPP 2009 reads as follows: *(e) if living rooms and private open spaces for a minimum of 70 per cent of the dwellings of the development receive a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter.* Subclause 14(1)(e) applies and it is advised to ensure that all the dwellings receive the required amount of sunlight.
Landscaped Area	Consideration should be given to Subclause 14(1)(c) of the ARHSEPP 2009, which requires at least 35m^2 of landscaped area per dwelling, where the DA is made by a social housing provider. The applicant noted at the meeting that they are seeking a significant variation to this numeric standard. The applicant was advised that a suitable planning justification would need to be made in order to support the variation to this standard. Discussion was held as to the justification being based around the demonstration of a well-designed and consolidated COS area

	onsite at the ground level that is not within the front setback area. Due to the expansive amount of hardstand as a result of at-grade parking area proposed, further consideration shall be given to the provision and integration of landscaped area onsite.
Communal Open Space (COS)	Objective 3D-1 of the Apartment Design Guide (ADG) states the following: *Communal open space has a minimum area equal to 25% of the site.* The development shall provide the required amount of COS based on the entire site area. The principal COS must be provided with a minimum of 2 hours of solar access between 9 am and 3 pm on 21 June (winter solstice). COS is an important environmental resource that provides outdoor recreation opportunities for residents, connection to the natural environment and valuable 'breathing space' between apartment buildings. It also contributes to the appeal of a development and the wellbeing of residents. The function of COS is to provide amenity in the form of: • Landscape character and design • Opportunities for group and individual recreation activities • Opportunities for social interaction • Environmental and water cycle management • Opportunities to modify microclimate • Amenity and outlook for residents High quality open space is particularly important and beneficial in higher density developments. As discussed at the meeting, the proposed COS areas at the ground level are not considered to appropriately address functionality and usability. This is especially the case where the applicant has proposed COS within the front setback. Any COS in the front setback would be considered in addition to the required COS onsite. In this regard, Council considers there to be opportunity for a better COS area to be provided at the ground level and behind the front building line through an amended building design. By reconfiguring the ground level units on the south-western corner of the building, there is the opportunity to provide a larger and more suitable COS area. This design would benefit residents, especially young families and low mobility residents, by providing a larger landscaped area at ground level that responds to a local park on the opposite side of Kurrajong Road.

Apartment/ Building Design	The proposed development will need to adequately address the design principles within SEPP 65 – Design Quality of Residential Apartment Development and shall be consistent with the requirements of the ADG.
Acoustic and Vibration Impacts	As per SEPP Infrastructure 2007, Clause 102 applies as the development is adjacent to a road corridor for a freeway. An acoustic and vibration report shall be submitted with application.
Social Impact Comment	In accordance with Part 1 (Section 27) of the LDCP 2008, a Social Impact Comment (SIC) will be required for the proposed development. The SIC shall address, but is not limited to, the following: • Site operation and management. • How the landscaped and communal areas will be designed to encourage social engagement and interaction and the intended purpose of the communal space areas. • Waste management procedures addressing the issues identified below:- o How bins will be stored before and after rubbish collection times o How the bins will be transported to and from the bin storage room in the basement
Waste Management	Facilities for ongoing waste management must be provided in accordance with Council's waste management fact sheet for higher density residential development, which is available on Council's website. Consideration should be given to how bins will be stored before and after rubbish collection times.
Substation	The proposed development is likely to require a substation. Therefore, the prospective development application must be accompanied by detailed architectural plans of the substation. If the proposed substation is located outside the building envelope, the distance between the substation and the closest part of the building must exceed 3m otherwise a 6m high fire rated wall will be required as part of the design. Substations located outside the building envelope are to be designed in accordance with Integral Energy Substation Design Instruction Document No. SDI 104 (Current Version) and the Endeavour Energy Property Tenure Guidelines. Substations will need to be appropriately integrated in the overall

	presentation of the development to the streetscape and shall not detract from any visual amenity associated with the proposal. *Note: It is strongly advised that the applicant liaises with Endeavour Energy prior to lodgement of the prospective development application.*
Engineering	<u>Stormwater</u> • Stormwater drainage for the site must be in accordance with Council's Development Control Plan. • A stormwater concept plan shall be submitted with the application. • The stormwater concept plan shall be accompanied by a supporting report and calculations. • On-site detention is required to be provided for the site. • The on-site detention system must be within common property and accessible from the street without going through dwellings or private courtyards. • A water quality treatment device shall be provided in accordance with Council's Development Control Plan. A MUSIC model shall be submitted with the development application. <u>Traffic & Access</u> • The application shall be supported by a Traffic Report prepared by a suitably qualified person. • The application must demonstrate that access, car parking and manoeuvring details comply with AS2890 Parts 1, 2 & 6 and Council's Development Control Plan. • The application shall be supported by turning paths in accordance with AS2890 clearly demonstrating satisfactory manoeuvring on-site and forward entry and exit to and from the public road. <u>Roadworks and Road Reserve Works</u> • The development will require the following external road works: o Construction of 1.5m wide footpath to Council standard and specification. o Demolition of any redundant driveway crossings and

	laybacks. Replace with Council standard kerb and gutter.
Earthworks	• No retaining walls or filling is permitted for this development which will impede, divert or concentrate stormwater runoff passing through the site. • Earthworks and retaining walls must comply with Council's Development Control Plan. • Proposed fill material must comply with Council's Development Control Plan.
Traffic	• A Transport Impact Assessment is to accompany the DA submission. • The car parking and access is to comply with AS2890.
Section 7.11 Contributions	A Section 7.11 Contribution Fee is applicable to this development.

Note:
This Pre-Lodgement advice is only a preliminary review of the concept development and the comments provided, written or otherwise, must not be considered as assessment of your proposal. Council is unable to make a recommendation on the proposal until such time as a full merit assessment of a lodged Development Application and its supporting documentation is undertaken.

The advice provided in no way fetters the discretion of Council in the assessment and determination of any potential application for the site. Additionally, any matters not identified in the below advice may emerge during the consideration of the complete application.

Information to be submitted with a Development Application

The following information is required to be submitted with any potential application. All the requested information is required to be submitted to enable a complete, proper and timely assessment of the application.

Please be advised that any potential application will not be accepted for lodgement unless all the required information is submitted.

Architectural Plans
• Survey Plan (confirming no building encroachments to easements, if any), • Architectural plans (site plan, floor plans, elevations and sections), ensuring that all survey details including boundaries and other site constraints are shown on the architectural plans), • Site analysis, • Shadow diagrams and shadow analysis of adjoining elevations, • Coloured perspectives, • Colour schedule of external building materials, colours and finishes, • Landscaping plan prepared by a qualified Landscape Architect, • Stormwater Drainage plan, • Demolition plan and statement, clearly identifying all structures to be demolished. • Strata subdivision plan if subdivision is sought; • Subdivision plan shall be superimposed over Council's Road Layout DCP (Indicative Layout Plan), where applicable. The required plan is to show the proposal, the immediate 2 adjoining properties on either side of the site and 3 properties across the street relative to the ILP;
Reports
• A quantity surveyors report which identifies the Capital Investment Value (CIV) and estimated cost of works, • Statement of Environmental Effects (SEE) including addressing section 4.15 of the *EPA & Act 1979* and Table of Compliance against provisions of LLEP 2008, DCP 2008 and SEPPS, • Traffic and Parking Assessment, • Site contamination investigation report, • Essential services report.
Digital Requirements
• 1 x CD Rom / USB containing electronic copies of all above documents accurately titled.

Other Supporting Documents
• Written justification of any variations to LLEP 2008 development standards in accordance with Clause 4.6 of the LLEP 2008, • Written justification of any variations to LDCP 2008 controls • SEPP 65 Design Verification Statement, • Waste Management Plan (for demolition, construction and on-going waste management), • BASIX Certificates, • Erosion and sediment control plan, • Earthworks plan and cut/fill and retaining wall details, • Sections depicting the relationship between proposed surface levels, floor levels, openings, type of opening, setbacks etc in comparison to the same elements on adjoining sites, • 1 x copies of the above reports/plans. Plans are to be no larger than A3 size.

Please do not hesitate to contact the undersigned on **1300 36 2170** if you wish to discuss this matter further.

Michael Oliveiro
Senior Development Planner
DEVELOPMENT ASSESSMENT

Appendix H Design Excellence Panel Meeting Minutes

LIVERPOOL CITY COUNCIL

Minutes

MINUTES OF DEP MEETING
14th June 2018

DEP PANEL MEMBERS PRESENT:

Lee Hillam	Chairperson
Alf Lester	Panel Member
Geoff Baker	Panel Member

OTHER ATTENDEES:

Nelson Mu	Convener

APOLOGIES:

Rodger Roppolo	Planner

OBSERVERS:

George Bakopoulos	SGCH	0423 608 400
Ian Lim	DK	0414 618 118
Gerard Turrisi	Gat & Associates	0416 257 833
Valdies Aleidzans	Gat & Associates	valdis@gatassoc.com.au
Matthew Ryan	SGCH	0401 647 577
Matt Ballam	SGCH	0437 813 929
Alex Soovoroff	SPM	0405 565 640

AGENDA:

Property Address:	30-38 Ironbark Avenue, Casula
Application Number:	PL-37/2018
Item Number:	3

1. WELCOME, ATTENDANCE, APOLOGIES AND OPENING

The Liverpool Design Excellence Panel (the Panel) comments are to assist Liverpool City Council in its consideration of the development application.

The absence of a comment under any of the principles does not necessarily imply that the Panel considers the particular matter has been satisfactorily addressed, as it may be that changes suggested under other principles will generate a desirable change.

The 9 design quality principles will be grouped together where relevant, to avoid the unnecessary repetition of comments.

2. DECLARATIONS OF INTEREST

Nil

3. CONFIRMATION OF PREVIOUS MINUTES

No

4. PRESENTATION

The Applicant presented their proposal for the demolition of existing structures and the construction of a 5-storey residential flat building with at-grade parking. The application is made under SEPP (Affordable Rental Housing) 2009.

The Applicant's architect explained the details of the scheme as follows:

- The scheme has further developed since it was submitted to Council for Pre-DEP and the applicant presented an amended scheme to the panel for its consideration.
- The challenge of the proposal is achieving the additional 0.5 FSR and the building is pushed to 3m setback from the side boundaries (option 1). Option 2 is 6m setback from side boundaries but 1 additional storey proposed over the allowable height.
- There are steps in the building responding to the slope of the land.
- The project does not incorporate a basement carpark.
- The top level is setback to add depth and character to the building.
- The building has been designed taking into account the orientation of the site: north facing apartments and corner apartments wrap around east and west elevations to take advantage of solar access. Minimal south facing apartments.
- The snorkel windows are designed to facilitate building articulation.
- Floor to floor level is proposed at 3150mm (response to brick height).
- The dominant materials of the building will be brick and glass.
- The scheme only provides for 1 and 2-bedroom apartments.

5. DEP PANEL COMMENTS

The 9 design principles were considered by the panel in discussion of the development application. These are 1] **Context, 2] Built Form+ Scale 3] Density 4] Sustainability 5] Landscape 6] Amenity, 7] Safety 8] Housing Diversity +Social Interaction 9] Aesthetics.**

The Design Excellence Panel makes the following comments in relation to the project:

- The Panel thanks the proponent for bringing the scheme to the Panel for consideration and the explanation provided by the applicant of the evolution of the scheme.

- The scheme should be designed to satisfactorily respond to the slope of the land. Site inspection by the Panel indicates that there is roughly a 2m cross-fall between the western and eastern boundaries of the site. The proposal presented to the Panel does not show how the building has responded to the cross site fall.

- No sectional drawings were included in the package of documents presented to the Panel to allow the Panel to better understand how the scheme has taken into consideration the characteristics of the site.

- The submission designates Communal Open Space areas along the Ironbark Avenue frontage, the western setback area and the adjoining one third of the Kurrajong Road frontage. The areas along Ironbark Avenue (which includes paved pedestrian access and letter boxes) and Kurrajong Road are not considered to provide functional and meaningful spaces that would contribute toward the amenity of residents. The open space at the western end of the site would receive winter sun after midday and has the potential to complement the rooftop Communal Open Space, but it requires design development to make it fit for this purpose.

- The roof top COS is partially screened by the building and thus, would provide some protection from the elements. The COS should include shad structures, amenity facilities, a toilet and barbeques.

- The site benefits from dual and broad street frontages to Ironbark Avenue and Kurrajong Road. The building should be designed to provide direct access to Kurrajong Road as well as a street facade frontage to Kurrajong Rd. The pedestrian path from Kurrajong Road should be conceived as a clear and inviting pedestrian connection that would encourage residents to utilise it, thereby contributing to the activation of the Kurrajong Road frontage of the site. It should not be designed as an afterthought.

- Open type fencing should be provided to the Kurrajong Street frontage. In addition screening of the open carpark is necessary.

- Given the width of the site and the scale of the development, on-site waste collection instead of on-street pick up should be provided.

- The site analysis documentation included in the presentation should be expanded to allow the Panel to better appreciate the site's development context and how the development has responded to that context.

- The scheme is well articulated. The Panel recommends that the Applicant should commence working with a landscape architect to further develop the external areas of the scheme.

- The Panel appreciates the Applicant's approach to achieving a smooth approval path for the scheme by designing a compliant building.

- The architectural composition and articulation of the building may be sufficient without the introduction of aluminium screens as discussed at the meeting.

General

Note: All SEPP 65 apartment buildings must be designed by an architect and their registration number is to be on all drawings. The architect is to attend the DEP presentations.

Quality of construction and Material Selection

Consideration must be given by the applicant to the quality of materials and finishes. All apartment buildings are to be made of robust, low maintenance materials and be detailed to avoid staining weathering and failure of applied finishes. Render is discouraged

Floor-to-floor height

The panel recommends a minimum 3050 to 3100mm floor-to-floor height so as to comfortably achieve the minimum 2700mm floor-to-ceiling height as required by the ADG.

Sectional Drawings

- Sectional drawings at a scale of 1:20 of wall section through with all materials, brickwork, edging details to be submitted.

6. CLOSE

The proposal is acceptable subject to the incorporation of the above Panel advice and is to be referred to the Panel for review when a formal application is lodged.